

# THE AMERICAN FARMER, AND THE SALT LAKES.

## SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT  
"AGRICOLAS." Virg.

VOL. I.

BALTIMORE, SEPTEMBER, 1846.

No. 3

### THE AMERICAN FARMER

It is published Monthly, at \$1 per annum, in ADVANCE—*Advertisements*, suited to the character of the paper, inserted at the rate of \$1 for each insertion of 12 lines or less, and in proportion for those of a larger size. Address (post paid)

SAM'L SANDS, Publisher "American Farmer,"

N. E. corner of Baltimore & Charles sts. Baltimore, Md.

It is A discount of 10 per cent. will be allowed to Agents.

### WORK FOR SEPTEMBER.

As autumn has again, in the revolutions of the seasons, come, it is meet that every agriculturist should set himself earnestly to work to fulfil those obligations of duty which it may impose; and while he may be thus engaged, let him see, that whatever he may have done, shall be *well done*, and *done in season*, as he may rest assured, that success in his calling very materially depends upon the observance of these rules. In preparing his grounds for his fall grain, he should spare no pains to have it *deeply* ploughed; to see that there be no balks left untouched, and that it be thoroughly pulverized by either the drag, or roller, and harrow. Although we are not of the creed of those who believe, that *pulverization* possesses the power of a panacea to make sterile soils produce luxuriant crops, we are free to confess, that we do believe it will make any, whether poor or rich, yield in a greatly augmented ratio, and this will be the more readily conceded by the thinking farmer, when he reflects that in the *atmosphere*, the *rain*, and the *snow*, are to be found most, if not all of the elements of fertility, and that by having his grounds in a state the best adapted to attract and appropriate these elements to their uses, the better chance will he stand of being profited by these fruitful sources of enrichment. Again, by deep *tilth* and minute subdivision of the soil, the roots of the plants have a bed prepared, which, instead of offering any impediment to their embedding themselves beyond the reach of frosts—beyond the influence of sudden freezings and thawings—encourages their expansion, and increases the pasture on which they feed.

With this introduction, we will turn our attention to see what should first claim our notice

### ON THE FARM.

*Preparation of the Wheat ground.*—In addition to what we have already said upon this subject, we will remark, that the sooner ground intended for wheat shall be ploughed and put in order for the reception of the seed, the better chance will there be of the crop being a good one, as the ground once ready and in good *tilth*, the farmer may choose his own time for sowing. And we would wish to impress this fact upon the mind of the wheat grower,—that *wet lands* are not adapted to the successful growing of the wheat crop, as they never fail to exert a pernicious influence upon the plants in the alternations of the weather during winter and early spring, and that it is impossible that healthful vegetation can be carried on, where the roots of the plants, during those periods, are buried in masses of mud and water. Besides good ploughing and fine *tilth*, it is essential that wheat fields should be secured by judiciously arranged water-furrows, at intervals of some sixteen feet apart, so constructed, and so levelled, as that the water, which may fall, will speedily pass off, and be conducted to leading drains around the field, of sufficient depth and descent to receive and convey it away. It would be better that *fields* abounding in a *superabundance* of *moisture* should be blind-drained; but as there is not now time left for such labor, the next best plan is, to do as we have advised above, provide them amply with sufficient furrows.

Should the ground allotted to wheat, not have *lime* or *marl* naturally present in it, the wheat grower should be sure to put at least ten bushels to the acre on it, and, if possible, add as much ashes to the lime, as both are necessary ingredients in the constitution of the straw and grain—and will not only tend to prevent the lodging of the former, but to promote the fructification of the latter.

It may be said, that the present price of wheat will not justify the trouble and expense we have marked out. True, the *price* is low, but in proportion to its depression, so should it be the object of the farmer to increase the ratio of product, in order, that, in the saving of the wages of labor, he may find his remuneration.

*Selection of the Seed.*—Too much care cannot be taken, in the choice of varieties, to select those which combine the qualities of early maturity, good flouring properties, and resistance of the fly; nor should less care be observed in procuring the best and cleanest seed which can be obtained; it should be plump, heavy, and free from all extraneous matters, so that in sowing it, the earth may not be filled with weeds also.

*Preparation of, and putting in the Seed.*—To prevent smut, all seed wheat should be well washed in clean water, so that all the lighter grains, and the seeds of weeds, may be skimmed off. To ensure this, the wheat should be put into a hogshead, in small quantities at a time; kept stirred, so that the impure grains, and extraneous matters may be floated to the top. This process should be continued until all such are removed, and the water, which should be drawn off and replenished occasionally, ceases to be colored by the operation. After this has been effected, let a brine be made of salt, or ley of ashes, sufficiently strong to bear an egg, cover the seed wheat with it, and let it soak for twelve hours, then drain off the soak, spread the wheat on a floor, sprinkle slaked lime, or ashes, over it and stir up the mass, so as to coat each grain with the substance used. When this is done, the seed will be ready for sowing. No more wheat must be taken out of the soak than can be sown each day, and care should be taken to plough it in as sown, not more than about *three inches deep*. The *harrow* and *roller* should follow the plough. Seed thus prepared and put in, will, besides being exempt from smut, come up quicker, grow more rapidly, and, of consequence, obtain a much better series of roots before winter, than would such as may be sown without preparation, and therefore be better able to withstand the effects of frosts and thaws.

On *clover-leys* and *grass-swards*, the seed should be *harrowed* instead of being ploughed in, as it is desirous not to disturb the sod, which should be permitted to remain, rot, and form food for the plants.

*Time of sowing.*—With regard to this matter, there cannot be said to be any general rule applicable to all circumstances of climate and locality. It should however be an object with every wheat grower to get his seed in sufficiently early, to enable the plants to form their roots, before their growth is arrested by the frost. The danger to be apprehended from the fly, when sown early, deters many from sowing until late; but we do think that there is more to fear from the injury of frost, when sown late, than from the fly when sown early. Taking all things into consideration, we are clearly of opinion, that every farmer should begin sufficiently early in September, to be enabled to finish by the *first of October*, or at the farthest by the 10th of that month.

*Of Liming.*—Where it may not be convenient to lime, or ash, at the time of sowing, the operation may be delayed until winter, when the lime may be put on while the earth is covered with frozen snow. Some of the best and most experienced wheat growers in Pennsylvania prefer this latter mode of liming.

Having spoken of the necessity of using *lime* and *ashes*, in connection with the culture of wheat, we may be indulged with further observing, that where there may be any deficiency in the natural fertility of the soil, the cheapest as well as the best manure that could be used would be *Guano*, in the proportion of from 150 to 300 lbs. to the acre, to be mixed with about ten times that quantity of mould and one bushel of plaster. The whole to be well mixed together, sown broadcast, and lightly harrowed in at the time

of sowing the grain. If not convenient to apply it at that time, it would do to sow it any time during winter on the snow, or in spring, from the first to the last of March.

*Of the procurement of Seed.*—We have no doubt that great benefit results from a *change* of seed, and that, in the economy of vegetable matter, it is indispensable to prevent deterioration of quality. The finest white flint we ever saw was four barrels we procured from *Genesee*, New York. We sowed it on a red clay, and the first product bore a pretty fair resemblance to the parent stock; but the product from that, the succeeding year, presented a sad evidence of change, having in two seasons almost lost its identity of character.

*Quantity of Seed per acre.*—We are among those who believe that when a man sows wheat, he should give to the earth a sufficient quantity of seed to occupy the soil with wheat plants, to the exclusion of grass and weeds: therefore we have always advocated the sowing of plenty of seed. On grounds worthy of being cultivated in *Wheat*, less than 2 bushels of seed per acre never should be sown, and under peculiar circumstances of soil and exposure, we should not hesitate to sow from 2½ to 3 bushels per acre.

As we have spoken of *Guano*, it may not be amiss to point out what we conceive would make a very excellent *substitute*, where that article cannot readily be obtained. Take two bushels of *Ground Bones*, 2 bushels of ashes, 10 bushels of rich Loam or mould, 1 bushel of Plaster, 2 bushels of Salt, and 20 gallons of Urine; mix the whole together well; let the mass remain for a few days, when it will be fit to sow. The quantity here named, is intended for an acre, and would, we have no doubt, tend to increase the yield thirty three per cent in the crop of wheat, besides greatly improving the succeeding crops of any rotation, which might follow, and leaving the ground in a meliorated condition.

*Rye.*—This grain, if not already sown, should be put in as early this month as possible, and with a view of providing pasture in early spring for the lamb ewes, it would be well to give it a sufficient fertilizing top-dressing, should the ground not be in good heart. From experience we are prepared to say, that the eating down Rye in *early* spring does not materially, if at all, interfere with the product of grain.

*Preparation of the Seed.*—We would advise that seed Rye be submitted to similar soak as that recommended for wheat, as should it answer no other end, it would facilitate germination, and cause the plants to grow off vigorously and encourage the formation of roots, and thus prevent what is termed winter killing. The ground allotted to Rye should be ploughed and harrowed with care; the seed should be ploughed in about three inches in depth, when the ground should be harrowed, and afterwards rolled—nor would we consider our work well done unless we sowed a few bushels of lime and ashes to the acre, say 5 of each, unless the soil had been previously limed or ashed.

*Quantity of Seed to the acre.*—A bushel of Rye should always be sown to the acre. In the selection care should be observed to get the best seed that can be obtained, and if possible that which was grown at some distance from your own neighborhood.

*Timothy Meadows.*—Every farmer should consider himself bound to provide his farm with a good timothy meadow, and if he contemplates setting one this season, the sooner the better it be done. To expect a luxuriant crop of this grass from a poor field is as

unreasonable as to expect a cold-blooded horse to stand a four mile heat. Therefore, he who may desire a good crop of timothy must provide the plants the means of feeding well. Besides lime or marl and ashes, there must be a generous supply of barn-yard or other nutritive manures. The ground should, if possible, undergo two good ploughings; the first should be done deeply; when after being thoroughly harrowed, dressing of say 20 double horse cart loads of manure, per acre, should be spread thereon, to be ploughed in about three inches deep; then harrow, sow the seed, and harrow it in lightly with a light harrow, around the teeth of which a grape-vine has been twisted to prevent the seed from being covered too deeply, and finish by rolling the ground. This latter process besides bringing the earth into immediate contact with the seed, thereby urging forward its germination, compresses the earth and presents to the scythe a smooth surface for the operation of cutting. If lime and potash be not already present in the soil, a few bushels of ashes and lime, per acre, should be spread on the field any time during winter when the ground is sufficiently firm to resist poaching.

*Quantity of Seed per acre.*—Custom has prescribed two gallons as the quantity of seed per acre; but we prefer to sow *three gallons* to the acre.

*Timothy meadows already set.*—To ensure a good crop of grass next year, you should some time this fall harrow your meadow, then top-dress it with a compost made of say 5 cart loads of rich mould, 10 bushels of ashes and 10 of lime or marl to the acre; mix these well together; sow the compost broadcast over your meadow and roll the ground.

*Garlic.*—He who may have a garlicky field should forthwith plough it up about 4 inches deep, so as to bring the roots of this pest to the surface to be wilted and killed by the sun. During late fall and winter so as to give the frost a chance of killing the garlic, give it two more ploughings, and next year put it in corn,—and should that crop be well tended, we think the destruction of the garlic will have been effected.

*Cornstalks.*—There seems to be a very general opinion prevailing that the grass crop has proved a short one. If this opinion is well founded, it may be well for farmers to be looking ahead to secure a supply of *winter feed* for their stock. In looking around in search of an article to make up the deficiency of the hay crop, we can think of no surer resource than is to be found in the *corn-stalks*. If these are cut up at the roots and well preserved, they make a most relishable and nutritious food, and if cut with a stalk-cutter and salted as fed out, will prove as good as clover hay for the cattle. Let us impress this fact upon our agricultural brethren.—*No farmer need have short commons for his stock who will cure his corn-stalks properly and judiciously feed them out.* If steamed, with the addition of meal or bran, they make a mess for milch-cows not only nutritious but highly encouraging to the secretion of milk.

*Sprouting.*—If your fields or fence corners abound in sprouts or bushes, go to work with a resolute determination and cut them down. The believers in lunar influence say that this kind of work should be done in the wane of the moon—but we say go ahead and cut them down when you can without regard to the position of the moon.

*Draining and Ditching.*—The season is propitious for this kind of labor, and of a certainty every farmer who may have a field needing it, should strain a point to have it drained, as no soil which may be in

the condition of *mortar* can produce good crops or sweet grass.

*Turnips.*—Keep them clean of weeds. If they are still small, run your harrow through them,—it is the cheapest and most effective mode of cultivating them.

*Orchards.*—If you have no crop in your orchards, you will find it to your advantage to turn your hogs in to eat up the falling fruit and thereby destroy myriads of insects.

*Balding and Inclosure.*—This is a favorable season for these operations and should be attended to.

*Selling of Stock.*—Give all your stock salt regularly twice a week.

*Sheep.*—In a trough at all times accessible to your Sheep, provide a mixture of *Salt and tar*. In licking the Salt they will smear their noses with the tar, and thus ensure themselves from attacks from the fly which otherwise would breed worms in their heads—recollect,—prevention is better than cure.

*Weeds.*—Cut all down you can find, and to prevent their seeds from annoying you next year, place them in heaps and burn them as soon as dry.

*Fences.*—Look to your *fences*; have them thoroughly repaired; recollect that as the pastures get short in the fall stock get restless from hunger and look out for *weak* panels in the corn fields; therefore, if you would be on the safe side, have all your fences well secured against such incursions.

*Tools, Implements and Gearing.*—Examine every thing of this kind that you have, if any need repair, have them repaired, and if not required for use have them carefully put away under cover, where they will be as secure from the weather as from thieves.

*Planting out Orchards.*—Although it is too early for this work, it is full time that you should be thinking of preparing any ground or lot that you may design for this purpose this fall. No orchard should be planted out on any ground which may not have been twice ploughed; therefore if you intend planting out an orchard this fall, the sooner you subject your ground to the first ploughing the better. Let it be a *deep and thorough one*, and see that it is afterwards well harrowed and rolled, and if the land be poor see that it be manured with compost consisting of well rotted manure, or virgin mould from the woods, and lime.

Having thus reminded you of what should be attended to on the farm, with your permission we will take a short walk in the garden, when if you will turn with us to our "*Horticultural*" Department, we will confer about matters and things requiring attention.

#### TO PREVENT SMUT IN WHEAT.

Since our own directions upon this important matter were written, we have received the annexed note from the Hon. *Wm. Carmichael*, whose authority with us, is equal to that of any agriculturist of our State :

#### SUCCESSFUL EXPERIMENT TO PREVENT SMUT IN WHEAT.

*To the Editor of the American Farmer :*

In the 3d vol. of the *Farmer's Register*, page 743, there is an account of a series of experiments made by M. M. de Bombasle, for preserving Wheat from the Smut, one of which he found entirely successful, and perhaps some benefit may be derived from an account of the advantage I have derived from its application. I recommend to you to subjoin that article, as it may give confidence to my experience.

Smut was brought on my farm, by changing my seed wheat, and tho' it never extended so far as to

produce very serious injury, I was very anxious to expel it; and in the year 1843, I used the means in the article I have referred to, according to the manner therein directed. At the next harvest, I found the smut much diminished, but some still remained. Last Fall I used the same means, under a different application. I dissolved in a large tub, 18 lbs. glauber salts in 22 gallons of water. The wheat was thrown into it well washed, and so much of the solution as was not taken up, was drawn off for further application; the wheat was then put into a bed of quick lime (slaked immediately before being used) on my barn floor, well stirred so as to produce adhesion to each grain, and then spread to dry.

I have lately finished threshing. I have examined the wheat, and have not detected a smut ball. This is also the experience of my overseer, and my most observant laborers.

I do not know that the germinating power would be injured if it remained unsown for many days under the lime, but to avoid the hazard, I have permitted the wheat thus prepared not more than three days unsown.

My neighbor, Mr. Wm. De Coursey, to whom I communicated the experiments of Mr. Bombasle, made one with common salt, by which the smut was much diminished, but some still remained. My experiment with glauber salts has resulted in entire success.

W.M. CARMICHAEL.

Wye, Queen Ann's co., E. S. Md.

The article referred to by Mr. C. is a translation from the "*Annales de l'Agriculture Francaise*," of a paper entitled "New Experiments on the means of preserving Wheat from the smut—by *M. M. de Bombasle*." Its length, in connexion with our prior arrangements and engagements for the present No., precludes our giving the article entire—but as the season is at hand in which to take advantage of the result of the experiments, we give the following abstract of the description of the process recommended by M. Bombasle, as the most effectual mode of preparing seed wheat, as established by his experiments, which, together with the results of Mr. Carmichael's experience, is worthy of the attention of the wheat-grower at the present moment:

Mr. B. says he has used the sulphate of soda in quantities varied in the proportion of 1 to 4, and as the germs of smut were completely destroyed by the weakest as well as the strongest dose, he gives the weakest as being sufficient in every case, though the greatest proportion, he ascertained, would not destroy the germinating faculty of the wheat.

The sulphate of soda is a salt produced in the manufacture of soda, and may be procured at the druggists, at a lower price than common salt; it is not poisonous; a solution of it in water will preserve its properties for a long time, and it may be prepared before hand for the duration of the sowing season. As for the lime, it should be taken in lumps and slaked by the addition of the small quantity of water necessary to reduce it to powder, or dissolve it. To be applied newly slaked, and if kept some time, preserve it from the air by placing it in a barrel with the head out, covered with a linen cloth, on which spread two inches deep, ashes, well dried sand, or other dry powder; whenever any of the lime in powder is taken out, this covering should be re-placed. These precautions are generally dispensed with in the various uses of lime, because when slaked, it preserves for a long time the same exterior appearance; but in pro-

portion as the lime absorbs the carbonic acid of the air, which is rapidly done, it loses its alkaline quality and becomes as inert as powdered chalk.

The sulphate of soda should be first dissolved in pure water, in the proportion of 80 grammes to the litre, or 8 kilogrammes to the hectolitre: as this salt does not dissolve readily, it would be well to perform this operation the night before, shaking the liquid repeatedly till the salt is dissolved. The grain to be limed should be placed in a heap on a floor of mortar, flag-stones or level pavement; it should be watered by means of a common watering pot, and at the same time workmen, furnished with shovels, should mix and stir up the grain rapidly; this process to continue till all the grains are well wetted over their whole surface, and the liquid to flow away from the heap, which indicates that the grain can receive no more: this operation absorbs about 8 litres to the hectolitre of grain; but it would be useless to measure the liquid, and it is sufficient to observe the rule just given. As soon as enough of the liquid has been received, and while the grains are still quite wet on their surface, the lime in powder is immediately sprinkled, stirring the mixture briskly all the time, and lime is added till it reaches the proportion of 2 kilogrammes to the hectolitre of grain. When the mixture is complete and all the grains are equally covered with lime, the operation is finished, and the seed thus prepared may either be sown immediately, or kept for several days; it may be left in the heap, but it is better to turn the heap over every three or four days; as it has not imbibed as much water as it does in the operations performed by steeping, it need not be spread out in thin layers.

Perfect exactness is not requisite in the quantity of lime, tho' some degree of approximation should be aimed at. M. Bombasle is very positive that if these precautions are followed, Wheat infested with smut to the highest degree, may be confidently sown with a certainty that it will not produce a single smutty head, at least in consequence of the disease of the seed.

AMERICAN INSTITUTE.—A writer in the *Albany Cultivator* claims for Alexander Walsh, Esq., Lansingburg, N. Y. the honor of instituting, or giving the first impulse to, the *Rural Department* of the American Institute, an honor which reflects, and will continue to reflect imperishable fame upon his cherished name. *The next Fair is to be held on 6th Oct. next, at N. York, to continue two weeks, and to be on a grand scale. It will be worth a journey of a thousand miles to witness it.*

Charcoal.—In one or two instances where charcoal has been applied to winter wheat in the State of Ohio, at the rate of 50 bushels to the acre, it has evidently prevented the injury of the very severe drought which has nearly ruined adjoining wheat fields. Mr. R. H. HAYWOOD, of Buffalo, is the owner of a large farm near Sandusky in Ohio, and has tried the use of pulverized charcoal with marked success.

Tobacco in Florida.—The low price of cotton last year induced the planters in Walton, Washington and other counties of Florida to raise Tobacco; the result was so favorable, that this year they are going into the culture on a large scale.

Tobacco Culture in Connecticut.—A correspondent of the *Brooklyn Gazette* says: "Tobacco is getting to be a great article in agriculture all along the valley of the Connecticut, and it is said there is no land in the world that will produce so good, and as much per acre, as our land will. I have about three acres growing for the first trial, and if it prove a good crop, I shall continue the cultivation of it."

*From the Rockville (Md.) Reporter.*  
AGRICULTURAL EXPERIMENTS.

We are enabled to lay before our readers, the following very interesting letter from Mr. EDWARD STABLER, our distinguished fellow-citizen, to his friend Mr. SAMUEL K. GEORGE, relative to his experiments with Guano.

It is only by the extreme kindness of Mr. S., (which we most truly appreciate,) that we have been enabled to furnish our Agricultural readers with so great a treat. It is written in that simple elegance of style, and couched in such clear and appropriate diction, that it will not fail to recommend itself to readers of every class and taste. We hope this will not be the only time that our readers shall be entertained and benefitted by the communications of our friend, S.

SANDY SPRING, 7th mo. 1845.

Respected Friend—Samuel K. George.—Agreeably to my promise when I purchased the Guano, I will now give an account of some of my experiments with it: and more in detail than I otherwise would, after reading the recent communications on the subject in the Farmers' Library. To my surprise, and somewhat chagrin, I observe a letter with my signature, and a notice of another published in the Albion, which I have not seen, or was aware of its publication. They are published contrary to my intentions, and indeed contrary to my expressed wishes; having been hastily written, and intended solely for private perusal.

I suppose I am indebted to my old friend, J. S. Skinner, for the honor: if so, I should have felt less regret, had he first "winnowed the chaff" from the "wheat" a little.

All my experiments with Guano, have not alike proved successful; and as it sometimes occurs, that even in a failure, either the operator himself, or others, derive future benefit by investigating the causes, I will give the result in both cases. I think I can very readily trace to the proper cause some of the failures reported.

Experiment 1st. On a field of oat stubble, which was in corn the previous year, and had from 75 to 100 bushels of lime to the acre, I selected a strip of one acre, near the middle, and extending through the field; after ploughing, the land was once harrowed; (the ground broke up and in bad order for seeding) and about the 7th of the 9th mo. (Sept.) 200 pounds of guano were sown by hand, without admixture with any thing; the ground was again well harrowed, and after remaining a couple of days, for the Guano to assimilate with the soil, it was sown with two and a half bushels of Mediterranean wheat; then well harrowed and rubbed in. About half of the field, and adjoining the Guano on one side, was just previously sown with the same kind and quantity of wheat, with the addition of 12 bushels of ground bones to the acre.

On the other side of the guano, and including the remainder of the field, there were about 25 ox cart loads (35 bushels to the load) of barn yard manure to the acre; and the seeding, the same as the other parts. In two or three weeks it was evident at a glance, that the Guanoed part had the start in vegetating; and which it steadily maintained until the harvest.

The relative growth of the crop was generally estimated by those who examined it, at about the same yield, for those portions with ground bones, and manure; but inferior, by 33 to 50 per cent to the Guano—that there was this difference, I am

fully satisfied; but having harvested only the Guanoed part separately, we cannot tell "what the half bushel says," to use an expression of our friend Law. For an experiment, the quantity of ground bones was varied on several adjoining *lands*; at no time was there a marked difference, between 6 and 12 bushels, or 12 and 18 bushels; but between 6 and 18 bushels, it was plainly seen.—The yield in grain of the first quality, from the acre with Guano, is thirty five bushels, (no account taken of the screenings or small grain) with by far the heaviest crop of straw I ever harvested. A single bushel weighed 65 pounds. The ground was accurately measured; and by weighing a dozen or two of the sheaves from different parts of the mow to obtain an average size, the whole crop was estimated at 4½ tons. But a small portion, either of this acre, or the field, stood thick enough; hence the great growth of straw. Although the quantity of seed sown might be considered ample, if all vegetated, owing to the drought when sown, it is probable, much of the seed was lost; there being just enough moisture to swell, but not to sprout the grain which lay near the surface. The opinion "that more seed would have made a better yield," has, I am aware, been controverted by some. In the present case, I am certain such would have been the result. All are not aware perhaps that in a bushel of Mediterranean wheat, there are not as many grains by about 50 per cent. as in a bushel of white bearded wheat; or by about 33 per cent. of the Red Chaff bearded wheat—neither does the Mediterranean wheat usually branch so well as either of the others. Fair as the present yield is, the addition of two to three pecks more of seed would have added in equal proportion to the crop; and forty bushels or more, could just as easily have been raised on the acre. In good ground, I have never seen this wheat too thick; and very rarely indeed thick enough.

Experiment 2d. About three weeks later, I sowed a lot (corn ground) with 150 pounds of Guano, and two bushels of white bearded wheat to the acre (about equal to three bushels of Mediterranean wheat). The land was limed in the spring, 70 bushels to the acre. The growth on this lot was about thick enough, and will I expect, produce more wheat to the acre than experiment No. 1; there was less straw, but the heads equally large and well filled. Adjoining this piece was a potatoe lot, which had been heavily limed and manured in the spring; it was sown with 2½ bushels of Mediterranean wheat, and 12 bushels of ground bones to the acre. To judge by the eye at harvest, the Guanoed lot will yield nearly 2 to 1; and certainly without any material difference in the quality of soil, or other advantage on either side, manure excepted.

Experiment 3rd. I sowed 100 bushels of ground bones on a part of my oat crop, at the rate of about 16 bushels to the acre; it was sown heavier than I intended, and only extended over about ⅓ of the field. Adjoining to the bones, and both extending through the field, Guano was sown at the rate of 200 pounds to the acre: the crop is materially diminished by the drought; but the difference in favor of the guano is not less than 50 per cent; and at a cost, as compared with the ground bones, of just one half; others have estimated the yield at double: this land was also limed the year preceding—about 70 bushels to the acre.

Experiment 4th. Finding the crop of grass likely to be very short, I ploughed up part of a clover lot (that had several years previous 100 bushels of lime to the acre,) and sowed 4 bushels of corn broad cast. Sim-

iliar to the mode adopted in my first experiment, there were 200 pounds of Guano sown to the acre; but leaving a strip of 10 feet wide through the middle of the lot, without Guano.—The crop has suffered greatly from the drought, and the part with Guano the most; i. e. the blades are more shrivelled, but is still, of the best color: all who have examined it, estimate the difference in favor of the Guano at 2, 3, and some even 4 to 1. Since the longer continuance of the dry weather, the difference is not so marked; there is yet however more than 2 to 1 in favor of the Guano.

As this is the era of experiments, I will briefly allude to another, not altogether foreign to the general subject. Anticipating a dry season, we used the subsoil plough after the bar-share, in this lot; but after 8 or 10 rounds, were compelled to abandon it, and double the team on the plough: the result is, a marked increase of the growth almost to a line where the subsoil plough was laid aside.

Experiment 5th. Just previous to planting corn, the land had 60 bushels (in all 120 bushels) of Lime to the acre; and as there was no rain to slack it, it was broken up and spread in a caustic state, and the land well harrowed. Within a few days, and for experiment, (for I feared the contact of the Guano with Lime in this state, 300 pounds were sown broadcast on 1½ acres; the ground again harrowed and the corn planted. It came up beautifully; perhaps not a hill in a thousand missing. When 4 to 6 inches high, an even table spoonful of Guano (or a handful to three hills) was dropped around and near the plant, but not on it, (the part sown broadcast excepted;) and occasionally leaving a row without Guano, the Cultivator following to mix it with the soil. Not long after the application of the Guano, the corn was attacked by the greatest of scourges, the bud worm, (eating into the centre of the stalk, near the surface of the ground,) and the first and largest growth literally destroyed; so much of it as outgrew the injury, was for a long time dwindling and weak.

This experiment I consider a failure; for at no time could any material difference be perceived in the growth of the corn, with and without Guano. A part of the field is low or meadow land; and has not suffered materially from the drought; here the corn is heavy; but whether attributable to the Guano, I know not: unfortunately, no rows on this part were left without Guano: and therefore allow it to be a failure, which I attribute to the contact of the Guano with the quick lime. For, on the lands apparently similar and equally limed, though a year and more preceding, there are numerous experiments in the vicinity on corn crops, where the effects of the Guano are most decided; both when sown broadcast before planting, and applied to the hill.

I have also applied Guano on my melon vines; a small handful to the hill, producing the most luxuriant growth, both of vines and fruit, as compared with the adjoining hills, without any. It was applied a day or two before planting the seed, and well chopped in with the hoe—the hills were once watered with a weak solution, (the ground being too dry to sprout the seed,) by soaking three Guano bags in a barrel of water.

It may be observed as a general, if not invariable rule, that if seed of many, if not most, kinds come into immediate contact with unadulterated Guano, they fail to vegetate. In my experiments, I carefully avoided mixing the Guano with plaster, ashes, or any other substance; because, if the crop was benefitted, I wished to know with certainty what to attribute it to.

My letter has already extended to an unreasonable and unexpected length; but I shall, I hope, be excused for a few additional remarks; promising not to afford my friend Skinner another opportunity soon to publish me.

The case of failure reported by John Mackenzie in the Southern Planter, given "for the benefit of the agricultural community," will benefit many, I have no doubt. I for one thank him for the communication. Presuming that it was the pure Peruvian Guano, his experiments as well as many others, go to establish the fact, that by a top-dressing on wheat in the spring, the "money and labor expended on Guano have been entirely thrown away." In my case, a different method of using it (and if I am not mistaken, both were of the same cargo—the Orpheus,) has produced results altogether satisfactory.

I have heard of but one such successful application; the case reported by our Senator, J. A. Pearce, of Chestertown.—But when applied as a top-dressing on wheat in the fall, so as to have the full benefit of the winter rains, it has in some cases succeeded well. Dr. Wm. B. Magruder, one of our most enterprising and successful farmers and planters, informed me yesterday that he believed his wheat crop was doubled by 200 lbs. of Guano to the acre, applied soon after the wheat came up. He also used it in his tobacco crop with evident advantage as he thinks—I saw the latter; and altho' it looked well, I am no judge of the crop, or quality, until manufactured. I have examined many of the experiments of my neighbors who joined our club in the purchase of nineteen tons last spring; and I expect every individual is so far pleased with the results, that at least as much more, —and some I know would double their purchases, would be used this fall, if the Peruvian Guano (with which all our experiments have been made) could be had at the same price.

The question has often been asked, how much wheat my land would have produced to the acre, without Guano,—the question cannot be answered with certainty: but to judge by the crop of the same kind of wheat on the adjoining field last season, and without manure; and also of crops under similar circumstances of my neighbors this season, I think 10 to 12 bushels a full estimate; 15 bushels at the outside. In their care not to let the manure extend beyond its prescribed limits, my hands did not spread it quite to the Guano; this left a strip through the field without any manure; and I am confident there was not  $\frac{1}{2}$  of the wheat on it; a space of 15 to 20 feet wide should have been left. Dr. Dupuy asks, "if the drought was as severe here, as generally through the country?" I presume nearly so or quite.

Our oats and hay are not more than half crops; and if not relieved 'ere long by rain, our corn crops will be still less.

The spring was unusually dry, and the wheat in experiment 1st, suffered in consequence; yet the situation being lower, was more in its favor than the manured part. The ground bones had in all respects equal advantages with the Guano: in neither, does any difference appear in the timothy and clover; both are good. Estimating the yield of the adjoining acre with ground bones, by the dozen sheaves, and it cannot vary much from the actual result, the latter yielded nearly 28 bushels.\*

\*A portion of this acre was unintentionally sown heavier with ground bones, say 16 to 18 bushels to the acre, instead of 12 bushels as intended. In this

For the benefit of those who are opposed to taking agricultural works, or refrain from doing so, which amounts to the same thing, I would add, that this field was completely worn out when purchased by me; the higher part, without soil; and the lower part, like mortar in the winter and spring, baked under the summer's sun like a brick. I had attempted draining, but not successfully.—

Meeting with an able essay on draining, in either the Cultivator or Farmers' Cabinet, I concluded to make another effort.

The field was well broken up in the fall and winter, and in the spring a heavy covering of lime put on; the draining was deferred, however, by a long illness confining me to the house for months. The crop of corn was planted; and the yield was not over 15 bushels to the acre. Previous to sowing in oats, there were not less than 5 to 600 yards of surface and under drains made.

I believe the increased crop of oats nearly paid for both the lime and drains. The result in the wheat has been stated.

Four years since, in the then state of the land, it would not have produced more than 5 bushels of wheat to the acre; now it is light and mellow, and will, most likely produce an increase in grass of 4 or 5 to 1. It is not a very difficult problem to solve, whether there has been a gain or loss in the transaction; when by expenditure of four dollars for 200 pounds of Guano, *twenty bushels of wheat additional* is raised to the acre; or that a single dollar for a year's subscription to an Agricultural Journal, should be the means, or suggest the idea for improvement, by which land that formerly did not produce over 5 to 10 bushels will now yield 30 to 40 bushels to the acre.

I am truly, thy friend,

EDWARD STABLER.

case also, the first crop more than repays the cost of manure, and will yield large returns in the grass crop, for years to come. We know the ground bones to be a durable manure. For a mere experiment one of my neighbors used a few pounds of Guano on his corn last year; the effect on the oats this season, is as marked as on the corn.

**GOV. HAMMOND ON THE COTTON CULTURE.  
REPORT OF THE COMMITTEE OF THE BARNWELL AG.  
SOCIETY (OF S.C.) ON THE CULTURE OF COTTON.**

*The ground cannot be too well prepared for Cotton.*—If it had rested one year it should be broken flush, as early in the previous fall as possible, and headed just before planting. If it has rested two years or been planted the preceding year, let it be listed as early as it can be done, and two furrows thrown upon the list. Immediately upon planting let two more furrows be thrown up, and balks broken out completely. The common method of running three furrows, and planting on it, throws the winter's portion of the crop-work upon the laborer, during crop time, and is inexcusable, unless heavy clearings are absolutely required. The reason for not listing after one year's rest, is, that the vegetable matter will be too abundant and too coarse to form a substratum to receive the tap-root.

*Cotton should be planted early.*—It may increase the difficulty of getting a stand, and give the plant, for a long time, a puny appearance, but every stalk of Cotton planted in March, or first week in April, that survives, may be readily distinguished, in any field that has been replanted later. It bears more, and earlier, and stands all the vicissitudes of June, July and August, better. There are several methods of

planting. Your committee recommend planting in spots, regularly measured by the dibble. It is somewhat tedious, though less so than is generally supposed, and certainly does not take as much time as both to drill and chop out; nor is time so valuable at that period, as when the latter operation is required, while a better and more regular stand may be secured. There is no land, or but little, in our district, in which cotton rows should be over three feet apart, or the cotton further than 14 inches in the drill, one plant in a place. To make a large crop there must be an abundant supply of stalks. When the weather is too wet to plant, time may be often saved by dropping the seed, but not covering until the ground is dryer. If, however, it cannot be covered in three or four days, it is time lost, for it must be re-planted. Always cover lightly, under any circumstances. And always plant on something of a bed, in any land. It keeps cotton dryer, and affords more air when it is young. It enables you to get at it in working. By increasing the surface, it absorbs more moisture, if it is too dry; and gives out more if it is too wet, and in both cases gives you the advantage of a vertical sun on the tap-root, which hastens the maturity of the bolls—a vast desideratum in our climate. On this account the bed can hardly be drawn too high at the last hoeing, in any season.

*In cultivating Cotton*, whether with the plow or hoe, the chief object is to keep down the grass, which is its greatest antagonist, bringing all, or almost all other evils in its train. It is not so essential, in the opinion of your committee, to keep the ground stirred, as is generally supposed, and by no means requisite to stir it deep; at all events not to our light soil. If it be well prepared, deep plowing is not only unnecessary for any of our crops, but often highly injurious to them, while it rapidly exhausts the land, by turning it up fresh, under a burning sun. Much unnecessary pains is usually taken, and time lost, to work the plant in a particular way, under the supposition that it is a peculiarly delicate one. If it survives its infancy, few plants are harder. It is often found to reach maturity in the alleys, where the mules walk with the plows following and the laborers tramp backwards and forwards. Sometimes it will bear fruit in turnrows used frequently for wagons, while it really seems to derive benefit from being bitten down almost to the ground by the animals, it will bear almost any usage better than it will that mortal enemy—grass.

The most critical operation in working cotton is thinning. It should be done with great care, and if early, with the hand. In a dry year, it cannot be done too early after the plant is up. In a wet one, it may be profitably delayed, until it has begun to form or later even. On the experience, observation and judgment of the planter, in this matter, everything depends, as each year brings its own rules with it. Where circumstances are favorable early thinning is of course the best. Some planters always top their cotton. Others never do. Your committee are of opinion, that it seldom or never does harm to do so. But whether it is worth the trouble, is a doubtful question. Those who have no clearing, or other important employ for their hands, would lose nothing by devoting three or four days to this operation early in August. Those pressed for time might gain by omitting it.

*Too much pains cannot be taken in preparing Cotton for market*, for they are well remunerated by the additional price. The first thing to be attended to, is to have it gathered free of trash. With a little care

wonders can be effected in this way; and hands with a short training, will pick almost, if not quite, as much without trash as with it. It should never be gathered when wet. And here it may not be out of place to remark, that one of the very best sanitary rules of a plantation is never to send out your hands to pick until the dew has nearly or quite disappeared. It saves time in the long run, as well as health and life. Cotton should never be ginned, until the seed are so dry as to crack between the teeth. If damp, it is preferable to dry it in the shade, as the sun extracts the oil and injures the staple. If, by accident, however, it gets wet, there is no alternative but to put it on the scaffold. It is of great importance to sort the cotton carefully, into several qualities, in ginning and packing, for by mixing all qualities together, the average of the price is certainly lowered. A few old hands or very young ones, breeding women, suckers, and invalids, will earn excellent wages in a ginhouse at this occupation. Neat packing is of no small importance, in the sale of cotton, and no little taste may be displayed in making the packages. The advantage of square bags is universally known, and the committee are astonished that any other should ever be made now.

*Every kind of manure is valuable for Cotton.*—Every kind of compost, green crops turned in, cotton seed and even naked leaves listed and left to rot, improves this crop. When planted on cotton seed, and sometimes on strong stable manure, it is more difficult to retain a stand, owing probably to the over stimulus of these strong manures. So, on leaves, unless well rotted, the cotton will long continue to die, in consequence of the leaves decaying away and exposing the root too much to sun and rain. These difficulties may be avoided, by a little pains, and by no means justify the opinion entertained by some, that cotton should never be planted on freshly manured land. The only question is the cost of the manure. A great deal may be made on every plantation, without much trouble or expense, by keeping the stables and stable yard, hog and cow pens, well supplied with leaves and straw. And also from pens of corn-cobs; sweepings from negro and fowl house yards and rank weeds that spring up about them, collected together and left to rot. Whenever the business is carried further, and a regular force is detached to make manure at all seasons, and entirely left out from the crop, it becomes the owner to enter into a close calculation of the cost and profits. In many agricultural operations, such a course, the experience of all countries has proved to be profitable, but these operations partake rather more of the farming and gardening, than planting character, and whether the same method will do for the extensive planting of short staple cotton remains, in the opinion of your committee, yet to be tested. If anything like an average of past prices can be maintained, it is certain that more can be made by planting largely than by making manure as a crop. If, however, prices continue to fall, and the growing of cotton be confined to a few rich spots—those susceptible of high manuring—then our whole system must be changed, our crops must be curtailed, and staple-labor losing its past value, the comparative profit of a cotton and manure crop, will preponderate in favor of the latter. As a substitute for manuring on a large scale, resting and rotation of crops is resorted to. In our right level land, the practice of resting cannot be too highly recommended, and, by a judicious course, such as resting two and planting two, or at most three years, our lands may not only be kept up for ever, but absolutely improved. From

rotation of crops but little is gained for cotton. After small grain, whether from the exhausting nature of that crop, on light lands, or because the stubble keeps the ground always rough and porous, cotton will not do well. After corn it is difficult to tend, as from our usual manner of cultivating corn, grass is always left in full possession of the field. It does best after cotton, or after a year's rest. Rest is the grand restorer, and the rotation chiefly required in the cultivation of cotton. J. H. HAMMOND, Chair'n.

#### BONE MANURE.

The three first essentials of oratory, as defined by Demosthenes, were action, action, action. With no greater limitation to his definition than was designed by this celebrated master, we may say that the first requisite for successful farming is manure, the second is manure, the third is manure. With these existing naturally in soils, or artificially supplied, everything can be done; without them, nothing. I shall confine myself, in the present article, almost exclusively to illustrating the effects of the application of bones to poor clay pasture lands, as they are detailed in England, and especially in a recent article on the subject, in the journal of the Royal Agricultural Society, by Wm. Palin.

He says: "Perhaps there is no county in England where the pasture lands, particularly the poorer soils, have been so much improved during the last twelve years, as in Cheshire, (the best dairy county in the kingdom,) and this principally by the application of bone dust. This extraordinary manure has a peculiar effect upon the poor clay land pastures; for, on application of boiled bones, a sudden change takes place in the appearance of the fields, and instead of the carnation leaved or pink grass, which so much abounds in this kind of land, luxuriant herbage presents itself, consisting of red and white clover, trefoil, and other grasses, of which the cattle are so fond that they eat up almost everything before them; even rushes and thistles are very much weakened and eventually reduced by being constantly eaten off by the stock, after the pastures have been bone-dusted."

Again, through a correspondent, he says: "In the winter of 1836, I laid upon a field of eleven acres one ton of boiled bones, crushed small, to the statute acre; the field had not been ploughed for a great many years, and produced a coarse, bad grass, which I could only get eaten down during the winter or spring. In 1837, I sowed the field, and had a very good crop, with much red and white clover. In 1838, I had a most extraordinary crop; and, perhaps, the most extraordinary thing was, that it was an entire mass of wild red clover. I never saw a fuller crop of common clover. I continued to mow it for three years longer, and had fair crops but not very heavy ones. The field was not then under-drained."

Another correspondent says: "I have known many instances where an outlay of £7 or £8 (\$35 to \$40) per acre for bones had been made, the annual value had been increased three hundred per cent.; and although a considerable proportion of the clover and trefoil may disappear after eight or ten years, yet an excellent herbage of permanent grasses remains very superior to what the land originally produced; and in my opinion, clay land, once well boned, will never again produce a bad herbage, if kept in pasture. I have known many instances where lands, which had been bound upwards of fifteen years, still retained a considerable proportion of trefoil and clover. Before bones were introduced into the county, farmers made a point of selecting a hardy and inferior de-

scription of stock for their clay lands, observing that large well-bred cows did not at all answer on them; but they now find that the best of stock obtain ample support, not only to supply the cheese tub, but also to do justice to their lineage, by retaining, if not improving, their size and symmetry. I have paid nearly £10,000 (near \$50,000) for this manure, and the result has, in every instance, been most satisfactory. I have known many a poor, honest, but half heart-broken man raised from poverty to comparative independence, and many a family saved from inevitable ruin by the help of this wonderful manure."

A Lancashire agriculturist writes: "Cheshire, it is well known, is a great cheese-making county, and within the last twenty years, a vast extent of its pastures has undergone an almost inconceivable amelioration from the application of bone manure." He cites an instance where, on a farm of ninety-eight acres, the number of cows kept had been increased from seven to twenty-four, by the aid of bones.

Mr. Stietch, an excellent farmer, estimates from his own experience that a first application of one ton of bone manure to an acre of pasture land, will, in many cases, make it of three times its value for productiveness. An extensive observer says he never heard of a single failure of bone dust in that part of the county. On sterile clays, ill-covered even with the least nutrition of vegetation, bone manure soon effects a decided change. On many farms, bones do not so much increase the quantity as they improve the quality of the food grown; and a greater quantity of cheese is frequently produced from a given quantity of land, rather than an increased weight of grass.

Another occupant says his stock was scarcely ever seen feeding on any other than the boned land, as it was so full of feed that it might have been mowed to advantage.

Instances occur where bone has been applied on wet land which had remained undecomposed and without producing any perceptible effect for many years; but when the land has been drained, after a few months the coarse herbage began to disappear, and it was soon covered with the finest sort of permanent valuable grasses.

The value of bones for most tillage crops, turnips, wheat, &c., is too well known to be here repeated. The foregoing examples will suffice to show the immense advantage poor pastures derive from bones.

Much, and, it appears to me, very stupid controversy, has existed, even among scientific men, as to the comparative value of boiled and raw bones. As analysis of each shows conclusively that the raw are much the more valuable. The analysis of Fourcroy and Vauquelin gives to ox bones, of

Decomposed animal matter	-	51.0
Phosphate of lime	-	37.7
Carbonate of lime	-	10.0
Phosphate of magnesia	-	1.3—100

The analysis of M. Guillot gives, for  
Calf bones, 54.0 phos. lime, .0 carb. lime.  
Horse do., 67.5 " " 1.25 " "  
Sheep do., 70.0 " " .5 " "

Yet, notwithstanding the great additional proportion of phosphate of lime, which has been maintained to be the sole fertilizing principle, by many distinguished scientific men, the experience of practical intelligent farmers, assigns much the most value to the ox-bones, which contain the lesser quantity of the phosphate. It follows conclusively that the decomposable animal matter extracted by digestion or calcination gives to them the increased value over other bones. The extractive matter, oil and gelatine, principally, is of much value in the arts, and is gen-

erally worth much more for this purpose than for the uses of agriculture; and where this is well understood, boiled bones sell for about 1-3 less than the raw.

The quantity usually put on an acre is fifteen to twenty-five hundred weight, though eight hundred weight has produced in some instances surprising effects.

R. L. ALLEN.  
*American Agricult.*

BUFFALO, Feb., 1845.

#### GRASSES FOR THE SOUTH.

**EDITOR OF THE CULTIVATOR**—Your correspondents frequently inquire respecting the grasses suitable to the south. If each would communicate what he has observed, it would be a sufficient answer to such inquiries, and might prove the most important benefit to the agriculture of the south. During this winter I have seen bundles of *northern hay* brought to the stables of my neighbor, which had paid for carriage many hundred miles round the capes of Florida, through the Gulf of Mexico, and five hundred miles (by the course of the river) into the interior. This is a standing reproach to the agriculture of the south.

**LUCERNE.**—This is found to grow well here.—Sow it in drills, in the early part of the fall, 24 to 27 inches apart; it flourishes, yields four to five cuttings in the course of the year: and on soil which would bring 20 bushels of corn to the acre, grows one foot and a half high. This season, some was cut on the 13th of March, for soiling; and was then from a foot to knee high. The most of it has been cut twice over, since the first cutting, to this day, May 13th. Cattle and horses eat it greedily; a cow, fed on it chiefly, yielding at this time between five and six gallons of milk daily; when as yet there is no grass in the woods or on the common, sufficient to change the poverty-stricken appearance of the cattle in "the range." I have made no hay from it; but have no doubt it will make good hay.

**GUINEA GRASS.**—The root is similar to that of the cane or reed, and is perennial. The stem and blade are like those of the Egyptian Millet. On rich soil it is very luxuriant, yielding many cuttings in the course of the year. It is good for soiling—horses and cattle eat it readily, and, if cut when in flower, it makes a hay most abundantly, of which cattle feed greedily in winter. Horses do not seem to like the hay. It is most readily propagated by the root. A small root, two inches long, with one or more joints to it, will vegetate; and, if the ground is made loose by plowing once or twice during the season after planting, roots placed in checks of four feet will take complete possession of the soil the first season; so that the next spring it will start up evenly over the soil everywhere. Hogs root after them with great eagerness; and as the tendency of this plant is to fill the ground with roots in so thick a mat that the grass does not grow tall in consequence, the idea suggests itself of pasturing cattle on this grass in the spring and summer, and giving the hogs the benefit of the roots in the winter. They cannot destroy it; the smallest fibre left in the ground will grow. It might be a great pest in a garden; but if land is to be used for stock it will take and maintain entire possession to the exclusion of any competitor which we have in middle Alabama.

**CLOVER AND HERD'S GRASS.**—I have now a beautiful lot of these grasses in conjunction, on high land; the whole about knee high, and the clover in flower. Mr. Kirby, one of my neighbors, cut the wood from a piece of low, pipe clay, crawfish land, last winter; and when the brush, &c., lying on the ground, had become sufficiently dry, he set fire to it and burnt it all off: thus giving it a top dressing of ashes. He then sowed Herd's grass on the top of the ground,

without plow, harrow, or any thing of the kind. He now has a most rich and beautiful crop of this grass growing. If desired, your readers may obtain further particulars of this crop.

*LEERSIA ORIZOIDES*, (rice grass.)—This plant so much resembles rice that only a practiced eye can distinguish them. The negroes on the rice plantations in Carolina call it “the rice’s cousin.” It will grow wherever rice will—in the water, or any damp situation. It is found in all the southern country; grows tall, seeds in a panicle not unlike a head of oats, and will yield two crops a year of *choice hay*; Roots perennial.

B. M.

Tuscaloosa, Ala., May 13, 1845. Alb. Cult.

*For the American Farmer.*

TO THE YOUNG FARMERS OF MARYLAND.  
ON PRACTICAL AGRICULTURE.

## Essay No. 2

## MEADOWS AND GRASSES.

“Farming” has too long been looked upon as a mere term, in contradistinction to “Business,” hence the adage “a business-man makes the best Farmer;” which is as true as trite; but does not a “business,” or “industrious,” man, make the best anything he undertakes, other things equal? The success of a mercantile man depends so entirely upon system, order, method and promptness, that without them, *he never can succeed*; with them, *he possibly may*—so with the Mechanic, and so with the Farmer!—Nor is there any good and sufficient reason, why he should not keep a regular set of books, *posted up to the day*; each crop or species of produce, such as Hay and Grain account, &c., being severally debited and credited, as the case may be—He should also keep a Diary, to record, for future reference and guidance, Seasons; Temperature; Times of seeding his various crops; Experiments; Results; Winds; Weather and Comments. Five years of such experience is worth more than half a century dosed away in that lethargy of intellect, commonly termed “Farming!”—As if agriculture were an idle dream, instead of the most concrete Science, as such, extant! Chemistry derives its *power from*, and is willing to contribute its *Knowledge to the ground*! Electricity, that all pervading, all-enchaining principle—or rather element—the grand lever of material creation; dispersing or concentrating, as the case may be, the most minute, or the most immense system of matter; Electricity, wooed from the *Clouds* by a Franklin, may one day become the humble instrument of reproduction, *beneath the Earth*, in the hands of the descendant of some now “mute, inglorious”—“Farmer!”

But we must descend to *terra cognita*, (on a streak of lightning if you please,) to our meadows and the grasses proposed to be, or now actually thereon—and excuse me, if I here remark, that I presume no young Maryland Farmer, who derives his “daily” bread from his avocation, keeps an “Overseer,” unless he cannot *see over* his estate in one day—naturally supposing this, I trust that however incomplete and crude, my ideas will be *read and tested by themselves in propria persona*.

“He that soweth little,” &c., is a literal as well as allegorical text; and my motto is, that if the ground you design seeding, in any thing, be not strong enough for a full cast of seed, *it is too poor for a grain*. How can wheat, for instance, *tiller* on poor ground, when a whole square foot is not rich enough to nourish a *single stalk*?

But my dear sirs, this paper is to be upon Meadows; the aspects and descriptions of soils most suitable for the several species ordinarily cultivated among us, and their comparative value, as nutriment for our stock, and for the market.

As we all should have an eye to “the money-crop,” it justly merits the title of “No. 1.”

*TIMOTHY*, within hauling distance of a city, is doubtless the money-crop, when wheat is below its intrinsic value, (§1) where the land is adapted to it—weighing more for its bulk than any of the grasses; being more “popular” among all keepers of horses; yielding more to the acre; of septennial growth, and very nutritious hay.

The naturally best land for timothy is a heavy, strong and cold, clay loam: which should be deeply ploughed, thoroughly pulverised when neither excessively wet nor dry.—If it lies precisely horizontal, with no declivity to carry off surplus wet, it should be marked off in lands, about four scythe (three cradle,) swaths in width, only slightly ridged or elevated in their centres, running the way there is the least perceptible departure from a strict level, without regard to courses of fences, and if practicable, inclining diagonally towards the nearest stream or other aqueduct; as there is less danger from washing when there is an apparently natural outlet, there being less resistance to overcome; but in no case, except reclaimed marshes, should your meadow be thrown up into high, narrow ridges: although a neighbor, albeit much older than I, argues, you “gain surface” thereby—The abstract fact admitted, you evidently *lose both land and crop*.—If the land be rolling or undulating, its natural surface should be preserved as nearly as possible; except when there are small deep cavities without egress for water, which should be filled up—and this holds in a hillside or gradual slope.—Lateral water drains, after seeding, but before rolling, should then be laid off with mathematical precision, subject to the laws of Hydrostatics—it being sad agricultural economy to open furrows either directly across, in parallelograms, or precisely down a hill; the one wearing into deep gullies, the other washing broadside, before the young grass forms a sod to prevent it.

A chocolate, or iron-ore soil, no matter how much elevated above the marine level, if it be level itself, is a fair Timothy soil; white lime-stone land, when loamy, is perhaps, nearly equal to white oak bottom; and when the two are combined, is the very best soil for this grass. This valuable meadow may be set upon upland and gravelly chestnut ridges, but it will never pay; never last long; and if Clover be employed as a protective, it will usurp its place the second season; or if they both maintain their ground, your hay will be almost valueless in the market, and not worth much, intrinsically, for your horses—and you have to sacrifice the one to save the other, the timothy for the clover, and vice versa.

It has frequently been urged upon the notice of, and perhaps, often practised by agriculturists, to let an old run-out meadow stand late to re-seed itself—One would scarcely suppose it necessary to combat such an error—so palpable and so manifest—The timothy being what is termed, an “artificial” grass (improperly, however, as it is as *natural* as any other species, being merely exotic in this country) is superseded by one or more of indigenous species, such as red-top or blue grass, and sundry noxious weeds, such as the “pink”—“ripple,” &c., the seeds of all of which ripen sooner than the timothy, and being native, or natural to the soil, require no cultivation; conse-

quently, instead of re-setting your timothy, you are setting a Pandora's box of evils, with scarcely a "hope" at bottom.

It does occur sometimes that an old meadow may be still tolerably well covered with the roots of timothy, which do not shoot up for want of nourishment; the compact, solid state of the surface rejecting all moisture—if this be the case with yours, and you have but one meadow, cut all in due season—indeed, if anything, somewhat earlier than usual, to prevent any seeds ripening of any kind, except, if there be a choice, one tenth of the whole which is heaviest; save the seed of this—harrow and cross harrow deeply, all the meadow, then cast the seed plentifully over it: follow this by a liquid top dressing—barn-yard essence, or Guano held in solution—and then roll it, as soon after the first good shower or rain, as the ground ceases to adhere to the roller—By this mode you save your hay and destroy the weeds—I would recommend as the *very best way*, to cut every stalk very early; purchase clean, fresh seed, and proceed as above—or plow it up to re-set.

I am now breaking up two small meadows set eight years ago, with a Sinclair & Co. two horse Dolphin plow, bar heel or landside, which turns the best sod furrow of any plow I have used—One of these meadows was seeded plentifully, the other sparingly; the former cut a tolerable swath this season, while the latter had no *timothy* on it, although better ground.

And here permit me to call your attention to Messrs. Sinclair, Jr. & Co's. latest improvement—and in doing so, I disclaim any desire to disparage any other. The "Maryland Plow," so justly styled by "A Paxtontown Plauter," combines with all the advantages of the centre draft principle, a superior mould-board for laying a flat sod in stiff soil: the point, of shear steel, lasts longer than any other "ever-point"; wears evenly, and from the length of the iron work and beam, draws more regularly than the justly celebrated "Prouty" of the same size. A slight concavity on the land-side,—first adopted, I learn, some twenty years ago by Messrs. Sinclair & Moore,—while it relieves the otherwise continuous pressure on the solid earth, only wears the extreme ends—heel and point, (and which last can be replaced at a trifling cost,) without impairing the general value of the iron work. In a word it works excellently—is light on the horses, plows  $\frac{1}{2}$  more than any other plow of same draught, and needs no "toating to shop" every day or two. Your anti-friction wheels, and intricate gearing, are first rate Blacksmith feeders, while to your cornfield Othello they are *positively incomprehensible*. Like an old schoolmaster of mine, who in endeavoring to discover perpetual motion, added one more wheel to *lessen the friction*.

Twelve quarts of seed, one half sown lengthwise and the other half crosswise, is not too much; and timothy should if possible be seeded alone, in a good rich piece of land; but if you must needs sow it with grain, try to harrow in one hundred bushels of ashes with it, fifty leached and fifty of dry. Some meadows have been well set on growing corn land, after the crop is laid by, being cultivated down level; but it is impossible to have a smooth, well rolled surface for the scythe, in this way; and the stumps of cornstalks are, to say the least of them, unsightly; nor do they entirely decay in three years. As to time—from the first of August to the last of September, I think the best gauge, the earlier within that time the better; especially if you expect a return the year afterward—But if not sown then, from the first to the

last of November is preferable to the interim, as, if seeded then, the young plants are just sufficiently obstinate to oppose an ineffectual barrier to the first thaw—whereas, like some human entities we wot of, being very small, in consequence of late sowing, they escape with impunity, being *too little to be hurt*.

An excellent plan for setting a meadow has been practised by a respected friend: it is this—sow in August with rye, mow the rye in April to soil with, or sell as green feed; the grass will then start up and produce a fair crop the first year.

By the way, to my friend, and neighbor, young R's. experience, am I indebted for a proof of the benefit of late sowing, but I regret his having delayed his hay harvest so long—which brings me to consider—

*The period for cutting Timothy*—Much has been said and written on this point—and it is one of great consequence—to the meadow, as respects its protection; the hay, as regards its quality, weight, nutritiousness and market value—and I here wish to state that whatever I advance as fact, I can, so far as my diary serves me, confirm by the test of experience. We all are aware that herbaceous plants possess most aroma when in full blossom, and that by the organic laws of vegetable economy the juices then concentrate their powers of reproduction;—the presumption naturally follows, that the plant then contains within its super-terranean portion an excess of sap, and attains its highest state of vegetable excitability; or if you prefer the phrase "strength"—and if so, the deduction is self-evident that then is the time to sever it, to prevent a double waste, that by the return to the root (the demand being supplied,) and the consumption in the seed, of this excess—Analyses may be infallible, when they can be correctly obtained, but the evaporation, consequent upon a reduction of a pound of hay to ashes, which would be accounted for as "lost," would convey away not water only, but a distillation, a compound, of the specific properties of the whole. Of course you perceive I am in favor of cutting all grasses when in full bloom,—Timothy, as soon as the blossom turns a dark brownish purple.

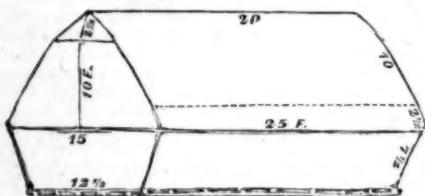
The idea that the stubble "bleeds" when cut early, is as it should be, nearly obsolete; for, the contact of steel alone with the sap of grass at any stage, produces out of its saccharine property, an astringent acid which almost immediately checks the "hemorrhage" (?)

Another proof of the error, in supposing the stubble bleeds when cut early, is before my eyes at this moment,—there being more (volunteer) clover than timothy, in a meadow set last year; to secure the former I ordered it to be cut when the latter had scarcely headed; the spot is now verdant with a second growth of timothy, some having actually branched out at the third joint. As evidence that early cutting is in conformity with nature, a tuft of timothy, isolated, being neglected, has thrown up a young second growth (1st August) around the old, dry stalks—as much as to say, "don't you see, old fellows, you are in our way, clear out!"—So much for cutting.

Curing is now reduced, the weather being favourable, to a very simple process—Few of our meadows are so heavily covered, as to require the swath to be twice shaken out, twice turned, winnowed and then cocked—shaken out once, if heavy, directly after having been mowed, it may be horse raked, two hours afterwards if clear, and put up in cocks, or even small, well pointed stacks, to complete the curing—where it will go through its first

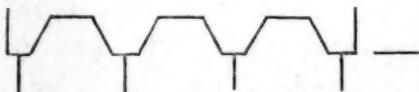
fermentation, and resist wet until all your grass is cut. You can then assort your hay, according to quality, preparatory to housing or stacking. Coarse salt, of any kind, should be sown over each layer of two feet—say a peck to the whole surface of a rick 15 by 25. It effectually prevents mow-burn or must in the hay; preserves a freshness, or newness, and renders it much more palatable to stock.

*Housing, &c.*—If you have plenty of good old fashioned barn-loft room, by all means house every pound; if not, and your purpose is to cover it in with a roof, or thatch it after ricking, lay off a piece of knoll, convenient to the barn, (but sufficiently remote to prevent the communication of fire from one to the other;) say for every fifty tons, a site twenty five by fifty feet, facing east and west. The object being rather to sustain a roof over, and protect, than support the hay, it should rest on a distinct foundation, formed within the spaces allotted for each rick, of logs and rails, to about the height of two feet from the ground—say three spaces of fifteen by twenty-five feet each; then start up your first rick on the middle foundation, say twelve and a half feet wide, and twenty five feet long,—the length of each rick being the breadth of the whole—Carry it up to fifteen feet in width at about seven and a half feet from the ground, nearly perpendicular  $2\frac{1}{2}$  feet, and then begin to draw in, until it attains the proposed height of twenty feet at corners; thus, as viewed from the south west corner:



The gothic arch suggests the most correct outline, slightly bent over, or inclined inwards, at the top points—Three such ricks being completed, side by side, let a space of one foot exist between their extreme breadths (15 ft.) which will leave enough room to shed the rain; to cut or load off one at a time; to pass the ties through, and also one foot space on each extreme end, for the timbers of the frame; in all, fifty feet—Fine long hay, or rye straw, should be used for topping off,—and the best hay stacked in the middle rick, as the others form a north and south protection, in a degree, to it. Coarse hay admits the weather.

Your barrack, or rather mow,—unless *soldiers* and *hay* be synonymous!—should be built of light yet durable wood, and roofed with plank, the seams being overlapped by another plank, two inches on each side, and well secured to prevent their warping: It should also be planked from the eaves five feet down; each space terminating, both for the sake of appearance and convenience, in three sides of a hexagon, thus—



By no means place a plank fence close around the base, because when the top of the hay becomes so low as to receive the rain, with a high wind, it will naturally

settle down behind the planks: the sun and air not being able to penetrate, a large quantity will decay—Should you wish to pasture near your mow, run a five rail fence around it, three feet distant.

A “Dutch Cap” as it is called, or movable mow, much used in New England, is the cheapest temporary covering for hay. It is composed of four upright corner posts: bored with holes at certain distances; they have a stout wooden pin inserted, on which the plates of the roof rest, and may be lowered as the hay is removed—planks tongued and grooved into each other, forming a roof, almost without nails; the whole may readily be removed to another spot.

My remarks upon Timothy having exhausted my time, and your patience I fear me, I shall advert to the other species of grasses in the proper season for sowing them,—merely remarking, in passing, that all meadows and grasses should be subject to the same rules, as regards cultivation and draining, as apply to this description; and that I am now experimenting with Lucerne, Orchard grass and Clover: sowing them this present month; the results you shall have.

I have omitted remarking upon the mode of setting with a root crop, Turnips for instance, as this plan, altho' very good, cannot be very extensively practiced.

In conclusion I beg to remark, I rather court adverse views than shun them; as my object is to receive as well as to impart instruction; hence I cheerfully claim the agricultural, not the dictatorial office, of Yours sincerely,

CINCINNATI.

Baltimore County, August 7th, 1845.

#### GUANO, LIME AND BONE-DUST.

To the Editor of the Am. Farmer.

SIR.—As a great many farmers are getting ready to sow their early wheat, it is all important that they should have the best information as regards the application of Bone and other manures with which they are not familiar, and which are also costly; you will render a great service to your readers generally, by giving direct answers to the queries below in the forthcoming number of the *Farmer*.

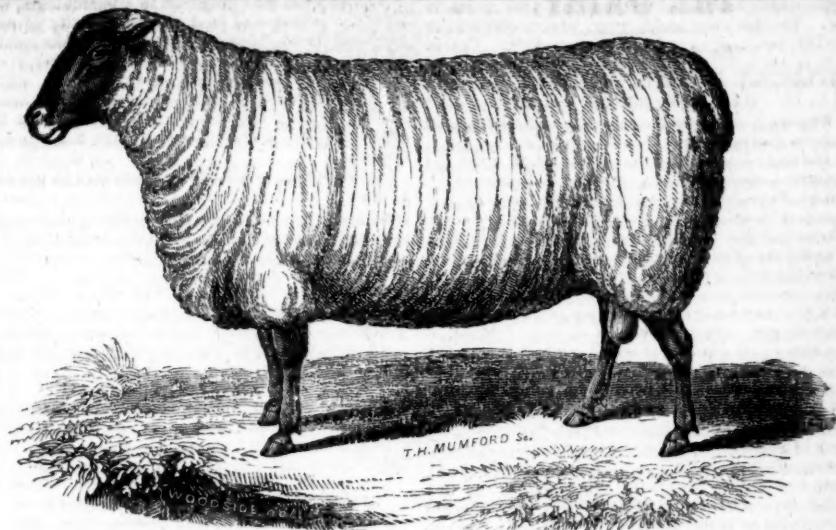
1. Will it answer to put Bone on land limed this spring? 2. Will it answer to put Guano on land recently boned? 3. Will it answer to put Guano on land recently limed?

Answers to the above Questions:—

1. It will answer to put bones on land no matter how recently limed.

2. It will answer to put Guano on land recently boned, as there is nothing in the constituent elements of bones calculated to act adversely to the operation of Guano.

3. We should be adverse to putting Guano on land “recently” limed, without incorporating a bushel of plaster to whatever quantity of Guano we might intend to apply to each acre of the land, and for this reason,—lime in a *fresh* state might drive off the ammonia of the Guano; but by mixing plaster in the proportion named, the ammonia would become as it were, *fixed*, be given out to the growing plants, through the voltaic action of the roots, as their necessities might require that peculiar pabulum, and thus would the possibility of the waste of that essential property of the Guano be counteracted. Indeed, in the use of Guano, we would always combine with it, a bushel of plaster to every 200 lbs., no matter whether the land had been recently or remotely limed.—*Editor American Farmer*.



PORTRAIT OF THE SOUTH-DOWN BUCK "PRINCE,"

THE PROPERTY OF AARON CLEMENT, Esq. OF PHILADELPHIA,

[REFERENCE TO WHICH WAS MADE ON PAGE 19, JULY NO. OF THE "AMERICAN FARMER."]

PRINCE is descended directly from an importation of pure bred South-downs, made by E. P. Prentice, Esq. He is 4 years old, and produced at last shearing 7 lbs. of wool of excellent quality. He is remarkable for his proportions, neatness, and beauty of form, as well as his great size, weighing in May last 230 lbs.

The South-Downs combine the two great qual-

ities most desirable in sheep, viz. wool sufficiently fine for general purposes, and superior mutton.

They are a hardy race of sheep, much disposed to fat, and when fatted, are capable of travelling a reasonable distance to a market. They are admirably suited to the high lands of the Southern States, perhaps more so than any other breed of sheep.

COARSE AND FINE WOOLS.

Mr. Newton Reed, of Dutchess County, New York, in a letter addressed to Dr. J. P. Beckman, published in the *Cultivator*, maintains that the difference between coarse and fine wool has been exaggerated—that is, the quantity of clear wool produced from the same amount of feed—that the heavy fleeced coarse wooled sheep are much larger than the Saxons, and require feed in proportion, but that the weight of fleece is not greater in proportion to the size of the carcass—that the Merinoes cast a heavier fleece, but not so clean wool; that the difference in amount of clean wool from sheep of the same size, and from the same amount of keep is not so great as has been supposed—that it begins to be understood by wool growers that a fine fleece is not necessarily very light—that a long staple is looked upon now by manufacturers with more favor than formerly; and it is found that a long staple is perfectly consistent with a fine fibre, and that long wool is less affected by the weather than short, as the fibres are affected only near the outer ends,—and that a thick fleece is also better; first, because there is more of it, and second-

ly, because being less exposed to the action of the weather, it is softer. These good qualities, Mr. Reed adds, may all be found in the Saxons.

We have given the above views of Mr. R., because they embrace *most* points in wool growing, and may incite discussions which may lead to something like settled opinions.

COL. RANDALL'S MERINO SHEEP—Last season we noticed the enormous clip of the Merino Sheep of Col. Hy. S. Randall, of this village. This season we learn that his Paular stock, including two rams, averaged over six pounds of *well washed* wool per head. A 3-years old ram sheared 13 pounds 8 ounces, (the heaviest fleece, we believe, ever taken from a *three years old* Merino in the U. S.) and a yearling eight pounds eight ounces. Many of the ewes sheared 6, 7 and 8 pounds per head, and one the unparalleled weight of 9 pounds 1 oz. Col. R. received the first premium on rams, and the first and second on ewes, at the State Fair at Poughkeepsie, (1844,) then the gold medal of the Society for the best managed and most profitable flock of sheep, at the annual meeting of the Society. Cortland against the world!—*Cortland, N. Y. Democrat.*

## THE DAIRY.

*For the American Farmer.*

### INFLUENCE OF FOOD ON COWS FOR THE PRODUCTION OF MILK.

The work of the farmer is like a hoop that has no end; it is certain that there is no business which requires more particular attention, especially to minute objects; every thing must be attended to, every thing must be saved, and every business done in season. Farmers in general are not fond of trying experiments, and are more attached to their old customs than people of other professions; this may arise from the value of their labor which they cannot spare from other avocations to make experiments, and from fear of being laughed at by their neighbors should they be unsuccessful. The best way, therefore, to introduce any thing new which is useful among farmers, is to give the ocular demonstration.

Being rather fond of making experiments myself, I had an opportunity of gratifying my propensity, while I resided on my farm at Three Hills. The results of some of the experiments made I have already communicated. I have given some experiments in regard to making butter in cold weather, by the scalding process; I have also endeavored to ascertain the difference in the quality of milk from different cows; the quantity of milk it takes to make a pound of butter, &c. &c.

To make cows give an abundance of milk, and of a good quality, they must, at all times, have plenty of food. It was my desire to ascertain the *kind* of food best calculated to produce the richest and the greatest quantity of milk. Grass is generally supposed to be the best food yet known, for this purpose, and that kind of grass which springs up spontaneously on rich hilly soils is considered the best of all. It is also generally believed and confidently asserted, that old pastures alone can ever be made to afford rich butter. This, however, I know from my own experience, to be a popular error, as I have had as rich and high flavored butter made from the milk of cows fed on meadows, or after-marsh, as those fed upon very rich old pastures.

It is well known to the most superficial observer, that in order to obtain milk from a cow, something must be given her to manufacture it from. For proof of this I will only refer to those persons who keep but one or two cows. Such persons generally *step* their cows—that is, they feed them the slops or swill of the house, with a small quantity of bran, ship-stuffs, or Indian meal mixed with it. Cows thus fed in addition to grass or hay, generally produce more milk than when fed on grass alone, evidently showing the necessity, if not economy, of liberally feeding cows while in milk.

From my own observation I am induced to believe that the *kind* of food has probably more influence upon the quantity of the milk than any other circumstance. It is well known to most dairy farmers, that the wild onion, the cabbage or turnip, when eaten by the cow, imparts to the milk and butter an unpleasant and disagreeable taste. It has been observed too, that when fed upon one pasture a cow will yield more cheese—upon another, more butter. Hence the difference in the quality of butter manufactured in different sections of the country. Orange county butter has long enjoyed a high reputation; but the best flavored butter I have ever tasted came from the hills of Vermont.

The experiment I am about to communicate, will show the influence of food on the quantity of milk produced from a given number of cows, in the months of June, July, August, and part of September, in all, 14 weeks. It is not, of course, very definite, still it shows the quantity of milk produced was graduated by the quantity of food consumed. Probably the temperature of the weather may have had some influence.

The following table shows the results as far as it goes:—

*Influence of food on the quantity of milk obtained from a given number of cows per week, for 14 weeks.*

From	lbs. of Milk.	State of the Pasture.
June 1st to 7th	937½	Grass rather short
8th to 14th	1036	" better—new pasture
15th to 21st	980	Pasture good—one cow sick
22d to 28th	836	Grass short
29th to 5th	724	" short and poor
July 6th to 12th	803	Pasture somewhat better
13th to 19th	679	Grass very poor
20th to 26th	514	Grass still diminishing
Aug. 27th to 2d	488	Grass growing poorer
3d to 9th	479	Feed very scant
10th to 16th	450	Do. very poor indeed
17th to 23d	966	Fresh pasture after-marsh
24th to 30th	846	Grass diminishing
Sept. 31st to 6th	868	Do. improved by rains

In order to have made the foregoing complete, it would have been necessary to have churned the cream and noted the amount of butter obtained from the milk of each week. It was my intention to have continued the experiments in the stable, weighing and measuring the food; and carefully note the results, but something occurred at the time which at present I do not recollect, that prevented, and it was dropped.

In the absence of my own experiments, I will offer the following, which is taken from "Lectures on the application of Chemistry and Geology to Agriculture," Part IV. On the products of the Soil, and their use in the feeding of Animals."

"Various sets of experiments have been made with the view of determining the relative quantities of butter and cheese produced by the same animals, when fed upon the different kinds of food. Much, however, remains yet to be done both by the practical dairy farmer and by the analytical chemist, before this subject can be fully cleared up. According to theory, the leguminous plants—clover, tares, &c. and the cultivated seeds of such plants—peas and beans, ought to promote the production of cheese; while oil-cake, oats, and other kinds of food which contain much oily matter, ought to favor the yield of butter. The most recent experiments we possess, however, do not lend any decided confirmation to these theoretical views. The most extensive series of trials lately published is that of Boussingault, from which I select the following:

(A.B.)

*First series, made on a French cow.*

Days after calving.	Kinds of Food.	qts. Milk.	Butter.
200	Hay	5	4.5
207	Turnips	5½	4.2
215	Beets	5	4
229	Potatoes	4 2-5	4
302	Hay and Oil Cake	2½	3.6

(C.) Second series, made on a Swiss cows.			
Day's Food.	qts. Mks.	but'r	
1st. After-grass	Evening's Milk	4	3.7
	Morning's "	4½	5.6
2d. 28 lbs. Hay	Evening's "	3½	5.1
" 2½ lbs. Oat-meal	Morning's "	4	3.9
3d. 28 lbs. Hay	Evening's "	4	
" 2½ lbs. Oat-meal	Morning's "	4½	4.6
4th. 24 lbs. Potatoes	Evening's "	5	6.7
" 14 lbs. Hay	Morning's "	4	4.9
" 8 lbs. Bean-meal			
5th. 14 lbs. Hay	Evening's "	5½	4.6
" 30 lbs. Potatoes	Morning's "	4½	4.9

The influence of breed upon the quantity and quality of milk is well illustrated by the result of a series of trials made at Bradley Hall, Derbyshire. During the height of the season, and when fed upon the same pasture, cows of four different breeds, gave *per day*—

(D.)

Breed.	Milk.	Butter.	or 1lb. butter yielded by
Holderness	29 qts. and	38½ oz.	12 qts Milk
Alderney	19 "	25 "	12 "
Devon	17 "	28 "	9½ "
Ayrshire	20 "	34 "	9½ "

It would appear from the foregoing trial that the Ayrshire cow gave the richest milk, and a larger quantity of both milk and butter than the Alderney or Devon, but the Holderness breed surpassed them all. It gave 1lb. more butter than the Ayrshires, and nearly one half more milk. It would appear, therefore, that the Holderness breed would be admirably adapted to the purposes of the town dairyman, whose profit arises from the sale of milk only.

The old Yorkshire stock, a cross between the improved Short-horn and the Holderness, is preferred by the London cow-keepers as giving the *largest quantity* of milk, though poor in quality.

Sprengel says moist and temperate climates are favorable to the production of milk in large quantity. In hot countries and in dry seasons the quantity is less, but the average quality is richer. Cool weather favors the production of Cheese, while hot weather increases the yield of butter.

In spring the milk is more abundant and of finer flavor: in autumn, other things being equal, it yields less cheese, but a larger return of butter. Where cattle are fed upon grass only, this observed difference may be derived from a natural difference in the quality of the herbage upon which the cow is fed.

If the cow be milked only once a day, the milk will yield a seventh part more butter than an equal quantity of that which is obtained by two milkings in the day.

C. N. BEMENT.

Bement's American Hotel, Albany, August, 1845.

## CHEESE MAKING.

The following directions for making cheese, is from the pen of Dr. Holmes, of the *Maine Farmer*, who not only knows how to make good cheese, but has a wonderful *penchant* for eating it after it is made:

During the hot parts of the summer, the farmer's wife will use the milk of the cows in the manufacture of cheese. Now although any body can put a quantity of rennet into milk and change it to curd, and then after separating this curd from the whey, give it a good squeezing, every one cannot do this in the

right way to form first rate cheese. A friend who has charge of a small dairy, asked us the other day to publish some of the "ways and means" of making good cheese. We therefore, out of pure good will to the ladies, re-publish our article on Cheshire cheese, and also throw the following hints in to boot, which we obtained from an old cheese maker in New York, and which have been published several times in different forms and papers.

He observes that the first step is to prepare the rennet properly, which is done by steeping it in water or sweet whey, which is preferable, and adding salt enough to keep it sweet. The quantity of rennet used in a given quantity of milk must be regulated by its strength. Some rennets are better than others, and therefore the strength of the liquor which a given quantity will make, is uncertain.

Put in enough to perfectly curd the milk. If you should put in too much, the cheese will puff up full of small holes and have an unpleasant taste.

In hot weather, when milk will be likely to sour in the evening, it should be cooled down to from 45 to 55 deg. of the common thermometer, (Fahrenheit's) which may be done by setting the pans in a cold place or setting them in cold water. Or if you have milk enough for large tubs, put in coolers of tin vessels full of cold water, so as to bring down the temperature of the milk. In the morning you may skim off the cream which has risen and put it by itself in a pan. You then prepare to set the milk, as it is called. Take some of the milk and heat it to blood heat—i.e. as warm as milk is when it comes from the cow—and pour the cream into it. There should be enough of this milk to liquify the cream. Then raise the whole of your last night's milk together with that of the morning's milk as it comes from the cow, and pour all together, that which has the cream with the whole.

Then add the rennet, and let it curdle, which it will do in about an hour. It may be considered to be all curdled when it will admit of a slight pressure without breaking.

While this is going on, some cream may rise to the top. Be careful and not let this escape with the whey, but skim it to one side of the tub, and put some curd on to it with a skimmer. And you must be very careful in breaking up not to let too much or indeed any of the cream or buttery particles become mixed and escape with the whey. Spread a coarse cloth or strainer over the whole, and let the whey rise up through it, and dip off as much as you can easily. Then remove the cloth and break the curd again as fine as you can with a skimmer, and dip off the whey again carefully.

Some of the first whey should be heated immediately after it is dipped off, and by the time the second whey is dipped off, the heated whey should be ready to scald the curd. Our informant says that it should be heated to about 130 deg., a little more than half as hot as boiling water, and that two pailsful were enough to scald the curd of forty pailsful of milk.

As soon as you have dipped off the whey the second time, break up the curd again, and pour on the hot whey and thoroughly mix it, and break the curd with the hand as fine as you can get it.

Then cool it by pouring on cold whey. Then move it into a cheese basket, over which a cloth is spread, in which all the whey is worked out by squeezing the curd as clean as possible.

Then put the whey into a cheese tub and salt it. Some add a teacupful to every 15 lbs. of curd, but a better way is to salt it to suit the taste. The salt

should be thoroughly mixed, for if this is not done, some parts of the cheese will puff up and have a different taste.

It is now ready for pressing, which should be faithfully done. Although there may be danger of pressing too much, there is more danger of not pressing enough; and the cheese not sufficiently pressed, will not keep well.

## THE AMERICAN FARMER.

### BALTIMORE, SEPTEMBER, 1845.

**TO CORRESPONDENTS**—We will answer in full, in our next, the queries of our correspondent in Kent co. on the subject of Charcoal—also those from another in Dorchester, upon the improvement of his newly purchased farm. "CECILIA" was received too late for this month.

**THE ALPACA SHEEP**—We had prepared a sketch of the history and value of this breed of sheep, but having been disappointed in receiving a cut of the animal which we wish to accompany it, we have deferred it to our next.

**HON. MR. GOWEN'S LETTER**—The Richmond "Times and Compiler" contains a letter from Mr. Gowen, of Mt. Airy, to Gen. Wm. H. Richardson, Pres't. of the Agricultural Society at Richmond. The history of this letter is thus given:

Gen. R. was in Philadelphia last fall, and visited Mr. Gowen's farm at Germantown, by invitation. There, to quote his own words in a note to the editor of the Times:

"Upon 100 acres of land, rescued from poverty and advanced under skilful management to the highest state of productiveness, I saw growing the finest crops of roots and corn I ever met with—barns stored with immense crops of the very finest hay and grain—a very large and fine crop of potatoes just gathered—a garden of the finest order in all respects—stalls and a grazing lot occupied by the very finest cattle, chiefly Durians, that ever I have seen—and styes filled with the finest hogs of all the best varieties—every thing, indeed, surpassing what I had previously met with anywhere."

At the request of Gen. R., for his own information as well as for the benefit of the Agricultural Society over which he presides, Mr. Gowen penned this letter, and it is as distinguished for its good sense and practical views of the farming interests, as it is for the lofty spirit of patriotism which it breathes.

We sincerely regret our inability to enrich our present No. with this letter, but our readers may expect it in our next.

**OF**—We have had in type for some time, an excellent article from the pen of M. W. Phillips, Esq. on the Agriculture of Mississippi, which we have copied from the "Transactions of the N. Y. State Agr. Society for 1844"—We shall endeavor to make room for it in our next; in whole or in part.

**OUR NEW SERIES**—We feel highly gratified and flattered at the manner in which our journal has been received since the change in its publication. To our brethren of the press, who have so kindly noticed our humble labors, we feel a deep debt of gratitude—to our old patrons who have so generously encouraged us with their approbation, and by the extension of our subscription list, we are wanting in terms to express our obligations—We must be excused for trespassing so far as to give a few extracts from letters from gentlemen in different sections of our country, whose names, did we feel at liberty to present them, would be found as familiar to the agriculturists of the nation as "household words."

The first is from a gentleman at the North, eminent for his good works in the cause—he says:

"Your 2d number, in its new form, has just come to hand, and allow me, without flattery, to say, that I consider it much improved both in matter and form, and destined to continue, as it always has been heretofore, a great favorite among the farmers. Like wine, it improves by age."

The 2d is from a gentleman in the Southern section of our State, distinguished for his zeal, success and public spirit in every thing calculated to advance the agricultural interests of his native state—he writes us:

"Your second number has been received, and it gives me the greatest pleasure to say, that if you continue to keep it at its present standing, you cannot fail in making it the most popular and at the same time the best agricultural work in the U. States, and I hope that the time will soon arrive when the encouragement of a very long list of subscribers will induce you to again publish a weekly. It is gotten up in a manner and style creditable to you and our State, and I trust that the agriculturists will think enough of their own interest to remunerate you handsomely for the expense and labor you incur in their behalf."

From one of the best farmers in N. Carolina, who says:

"I have received your 2d No. and find it well filled with useful matter for the farmer's consideration—and it is worth the dollar paid for the 12 months. I shall continue to encourage for your paper, until all my acquaintances are supplied. My skill in farming has given me some notoriety in a large portion of the state."

From an eminent farmer on the Eastern Shore of Md.:

"You are entitled to much credit for No. 2—I hope you will be sustained in such a paper. I will do all that is reasonable for you, as opportunities may occur."

One more extract—from a distinguished son of the Old Dominion:—"I was glad to find that you have kept in view, and are going on with the same work in which you have so long, and so laudably labored; and am gratified to see the contents of your two new numbers, and hope you will be compensated by its circulation thro' the country. I was a subscriber from the beginning of the "Old Farmer," and shall not abandon its colors."

Tokens of approbation from such men, are calculated to stimulate us to continue the exertion of our best faculties to render the "Farmer" worthy of their encomiums, and of the support of that class of the community for whose benefit we have so long and faithfully labored—and we have no hesitation in saying, that, for valuable practical information, as long as we have been catering for the public, we have seldom had it in our power to present a richer treat than is given in the present No. We have no fears but that our assertion will be confirmed by the reader, when he has carefully examined the same.

**OUR PRESENT NO.**—will be found a rich one—Passing by our own lubrications for what they are worth, we would call attention to the invaluable paper from Mr. E. Stabler of this state, giving the results of a number of experiments made by him—it is worth much gold to the farmer. Also to the experiments of Mr. Carmichael in preparing seed Wheat to prevent Smut—To the communication of "CINCINNATUS" on the very important subject of setting Timothy Meadows, &c. which will be found very valuable—The Report on Cotton culture, by Gov. Hammond of S. C.—On the Grasses suited to the South, by an Alabama Planter—On the management of Dairy cows, by C. N. Bennett, esq. of Albany, which of itself is worth a year's subscription; also directions for the manufacture of Cheese by Dr. Holmes of Maine—On the value of Bone Manure, by R. L. Allen, of Buffalo—On the Grape culture, by R. Sinclair, and also by the Hor. Soc. of Cincinnati—On the diseases of the peach &c. by R. Chisolm, of S. C. and others—besides a vast quantity of valuable matter in regard to Horses, Cattle, Sheep, &c. their diseases, management, &c.—and on the subject of Agricultural Implements, &c.—The Horticultural, Floricultural, and Ladies' departments, will also be found to contain a variety of choice and valuable articles—And the materials already on hand for our October No. enables us to promise that that will not be a whit behind the present.

**COMPLIMENTARY**—A letter on business from an ex-editor of one of the most respectable journals in Ohio, adds—"When I become settled you may reckon on my becoming a subscriber to your valuable Agricultural paper, which I consider the best of the dozen with which I exchanged while conducting the *Gazette*."

**CROPS IN ENGLAND**—The last accounts from England by the steamer, advise us that fears for the safety of the harvest, as well in England, as in the countries bordering on the Baltic, are daily on the increase—The weather continued broken, the temperature low, but little sunshine, and absence of warmth was supplied by occasional rains, which had done serious but not irreparable injury to the growing crops, and flour had ad-

vanced 2 to 3s. The news created an excitement and caused an advance in the New York market—20,000 bbls. were taken in N. York on English account, to fill orders by the steamer.

Cotton had declined a trifle since the former advices, in consequence of the gloominess of the weather, but had rallied again before the steamer left. The advices are to the 5th Aug.

**CROPS IN NORTH CAROLINA**—A letter to the editor of the *American Farmer*, dated Edenton, Aug. 16, says :

“We have had within the last few days repeated showers of rain, after having experienced an unusually dry summer previously. The corn crops are, however, tolerably promising; but the cotton crops are rather backward in their progress, owing to the almost unprecedented cold spells we had in the spring. Our wheat crops have been cut off more than half, occasioned by the sharp frosts and cold weather in April & May, followed by a long spell of dry weather.

“I am much pleased with your monthly publication—think it infinitely better than your former plan; enabling you to prepare and collect the most valuable and interesting articles, and putting it in a more *book-like* form. Your articles recommending the work on the farm, &c. for the different months, are very interesting, and I hope you will continue the prosecution of that plan to its fullest extent. The engravings and cuts in your monthly, add greatly to its value. Hoping that you may be successful in a high degree in the publication of your Monthly, I remain, &c.

T. S. H.”

**BALTIMORE CO. AGRICULTURAL SOCIETY**.—The question has been often asked within the last few months,—*whether this Society intend having a Cattle Show and Fair the present autumn?* And as we have been unable to solve the question, we should be obliged if the *Executive Committee* would put us in possession of the necessary information to enable us to do so. From the energy and devotion which has hitherto distinguished the gentlemen composing it, we feel assured that their best exertions will not be wanting to give to the future action of the society the proper direction, and that they will leave nothing untried which they may deem proper to sustain its interests, and maintain a generous spirit of emulation among its members.

New societies are forming in some of the Counties in our own state, as well as in those of our sister and neighbor Virginia, and we should regret to see one so well organized as that of Baltimore county die of inertia.

**MEDITERRANEAN WHEAT**.—The price of this wheat is about 5 to 7 cents less than other varieties, and the flour made from it, to a considerable extent, has been reduced by the inspectors in the standard. In a recent visit to Washington county, Md. we mentioned this fact to our friend, Mr. J. Funk, on Beaver Creek, a gentleman noted for the excellence of his Wheat crops, having raised 33 bushels per acre in succession of the same field, with no other manure than that obtained from the barn-yard. He informed us that such had been the case in his vicinity, but that when his grain was sent to mill, he directed that notice should be given a day before grinding; accordingly, *he repaired to the mill, spread out the wheat, and sprinkled it with water, and thus left it till the following day, when it was sufficiently dry to grind—and his flour was equal at least, if not superior, to that from wheat of any other variety.*

**HEAVY WHEAT**.—M. A. Slagle, of Conewago, Adams co. Pa. threshed and weighed about 50 bushels of his wheat, and found it to average 69 lbs. per bushel. It was the Mediterranean.

John Lilly of the same county, threshed a small lot of his white Wheat, obtained from Bedford co. that weighed 68 lbs. which he supposed would be the average of his crop.

Mr. Delashmutt of Buckeytown, Fredk. co. Md. delivered a load of his wheat at mill, which weighed 69 lbs. to the bushel, and it is thought his whole crop will average 68 1-2 lbs.

Mr. John Orndorff of the same county, has grown white wheat this season, weighing 70 lbs. to the bushel.

**RYE**.—Mr. Thos. Keeney, of Howard district, has shown the editor of the Free Press, a bundle of 95 Rye stalks, all raised from one seed, upon which are upwards of 4500 grains.

**GUANO**.—It is stated that Guano of a good quality has been found in Florida.

**OF THE CROPS**.—*The Wheat Crop*.—All accounts, from every part of the country, agree that the Wheat Crop is larger this year than it has been for many years, and that the quality of the grain is superior. With this accession of quantity, without any corresponding demand from abroad for it, we apprehend that prices will rule low the ensuing year. From every information we can derive and we have sought it in various quarters, the chief reliance for the sale of this great staple article will be upon the home-market.

*The Cotton Crop*.—Owing to the drought, insects, and other causes, we are inclined to believe that the cotton crop of the present season will not, by many per centums, reach what may be termed a fair average yield. But when it is considered that large quantities of former years’ crops are on hand both here and in Europe, we fear the prices, will not appreciate, as we could wish them. For several years the *supply* has largely exceeded the *demand*, and hence it is, that the falling off in a single year’s product must be strikingly great to operate any material enhancement of price. *Production* may be augmented at any time, greatly beyond the wants of consumers; but it is quite another matter to increase consumption, that being regulated, in a measure, by the actual wants and necessities of communities. Cheapness does often create, as it were, artificial wants, which for a time may improve prices; though this state of things can only remain for short intervals, when things relapse, by the power of re-action, into their original channels, and the speculator generally has to pocket the loss.

*The Tobacco Crop*.—After weighing and comparing all the information we have been able to obtain with regard to the Tobacco crop, we have arrived at the conclusion, that the *entire crop of the country* will not turn out more than *two-thirds of an average one*; but whether this material falling off in the growing crop will have the effect to *increase prices*, is a matter which we cannot undertake to determine, with the lights before us. In the good old Tobacco days of 20 years ago—before the region of production had become inflated—the prospect of but a two-thirds crop, never failed to bring money into the pockets of the planter: so certain was this result, that it had grown into an adage, that *two-thirds* was worth more money than a *whole crop*,—and there was nothing strange in this, as the relative value of the article was determined by the demands of consumption, and the facilities of supplying them.

*The Corn Crop*.—The late copious rains, though long delayed, have changed the fears of the community of a *short crop*, into the hope that it may prove a *fair average one*; but we cannot get our consent to indulge in this hope, gratifying as it would be to our heart could we do so. The rains have been pretty general, and as copious as general, and will go far to make the late planted corn productive; but in all our Southern and Southwestern range of States, a very large proportion of the corn was planted early, and all such, tho’ it may measurably be benefitted by the late rains, cannot, we fear, be benefited to such an extent as will very sensibly affect the product. As corn is emphatically the *grain crop* of the country, any very serious diminution of yield must, and always will, impose serious inconveniences and discomforts upon a very large portion of our population who rely upon it for bread.

*The Oat Crop*.—Comparing all the accounts we have received, we have come to this conclusion, that, taking the *entire extent of the country* into account, the oat crop has been about three-fourths of an average one.

*The Rye Crop*.—This is an uncertain and precarious crop at best,—never to be relied upon—often when promising most, disappointing both hope and expectation. The crop of the present year, however, we think better than usual.

*The Barley Crop*.—The product of this grain the present season, has been good. Much more than is, should be cultivated.

*Root Crops*.—It is too soon yet to talk of results; but we shall be disappointed, if the root crops of the present year do not turn out favorably.

**BEMENT’S HOTEL, ALBANY, N. Y.**.—We refer our readers to the advertisement of our good friend *Bement*, who, as we have before had occasion to state, is keeping a *Hotel* in Albany.

It is superfluous for us to say to the readers of agricultural papers, that Mr. B. is a distinguished breeder and farmer, for he has long since made himself known to them by the force of his own powerful pen. But we will say, that we do hope that no farmer or planter will go to Albany without giving him a call—and this we will promise them, that if they call once they will call again, as he is as distinguished as a *host* as he was, and is, as an agriculturist, and surely when we say that, we pronounce the best eulogy which the lovers of good eating and a gentlemanly landlord could desire.

**DELAWARE AGR. SOCIETY**—We learn from the Wilmington Journal, that Dr. Joseph E. Muse, a distinguished agriculturist of our State, and Hon. Jonathan Roberts, of Pa. are to deliver addresses before the society at Wilmington, at the annual exhibition on the 17th & 18th of this month (Sept.)

**HARVESTING OF CORN**—As the grass crop in many parts of our country has proved unusually *short*, we deem it our duty to call the attention of farmers, wherever it may have so proved, to the propriety of harvesting their corn by cutting off the stalks at the ground, so soon as the grain upon the ears shall have become *glazed* and somewhat hardened. Corn-stalks, thus cut, while the sap is still present, will carry on the ripening of the grain, fully as well as if the stalks had been left standing; while the stalks, thus cured, make a highly nutritious provender for stock. When *cut up*, and fed out, they especially are relished, where a little salt and water is sprinkled over them; so also when they may be steamed and salted in the mass, or where a small portion of meal or bran is mixed up with them in the form of slop. In this latter mode, they make a rich milk and butter yielding mess for milch cows. If saved with the folder and tops on, and properly cured, we hold it that, weight for weight, they are as nourishing for cows, and will go as far, as the best clover hay. No one who will take pains to save his stalks, need be at a loss for provender—nay, every acre of his cornfield will enable him to carry a head of his cattle through the winter in good health and condition. In cutting up stalks, every *fifth hill* of corn should be left standing, against which the preceding four hills, as cut, should be placed, being first bound together with one of the stalks, or a whisp of straw. In this position, the whole should be left until it is time to crib the corn. As the corn is hauled in, the ears should be pulled off, and the stalks, with the folder and tops on, packed away under cover; each layer of which should be salted, say in the proportion of a peck of salt to a ton of stalks.

The stalks as used for food, should be cut into pieces about 2 inches in length, and steamed, so as to soften the outer-crust and render them easy of mastication and digestion.

Whilst on this subject, we would take occasion to advise those who have not done so, to obtain a Corn and Cob Crusher from some of our manufacturers, in order still further to supply the demands of their stock the coming winter.

**BUCKWHEAT**—In connection with the shortness of provender we will remark, that *Buckwheat*, if cut when in bloom, cured with care, and salted as stowed away, makes a very excellent substitute for fodder. If sown the first ten days in this month, there will be time enough between then and frost to grow a crop. When sown for hay, from *half a bushel to three pecks* of seed to the acre should be sown, and the better the ground the more certain will be the chance of its coming into early bloom. To make assurance doubly sure, we would soak the seed, and roll it in plaster, which process would bring on an early germination of the seed and promote a vigorous growth of the plants.

**SKINNER'S FARMER'S LIBRARY**—By the table of contents and the notices we find in other journals, whose editors have been more favored than ourselves in receiving copies of the numbers issued, we have reason to believe that the “Library” is fulfilling the highest expectations entertained of it under the conduct of its talented Editor. As there has been an omission somewhere, not intentional we are confident, which has prevented our receiving a copy, we would thank our friend Skinner to apply the remedy.

By the subjoined article it will be seen that it is proposed to establish in the city of Baltimore, a **FARMERS' CLUB**, upon the most liberal terms. Of the benefits of such an institution there can be no question. Similar ones have existed in various parts of Europe for many years, and have been productive of the happiest effects—one, also, is in “the full tide of successful experiment” in the city of New York, where its beneficial influence upon the interests of husbandry is both felt and acknowledged. **Farmers' Clubs**, when conducted upon liberal principles, serve to bring the agriculturists together, to diffuse the science and practice of remote points among the general body; to form acquaintances and friendships, and to infuse into the public mind a spirit of emulation which never fails to leave behind it the traces of its beneficent action.

We trust that this effort at the organization of a Club, will meet with the approbation and support of every farmer in Baltimore county and the state at large, as well as of every scientific individual and friend of agriculture in our city.

#### MARYLAND FARMERS' CLUB.

It is proposed to organize a Society in Baltimore, under the above title, to be composed of active members, land-owners within the limits of Baltimore Co. and of Corresponding and Honorary members, land-owners and agricultural writers residing in the several counties of Maryland, other than Baltimore, and also of such persons as are distinguished either for their labors or writings in the cause of agriculture, in the other States and Europe.

The chief object of the Club will be to extend the practical knowledge of farming, throughout its various ramifications, by social conversations, periodically, confined to agricultural themes—Politics, save when inseparably a part of farming economy, to be out of order.

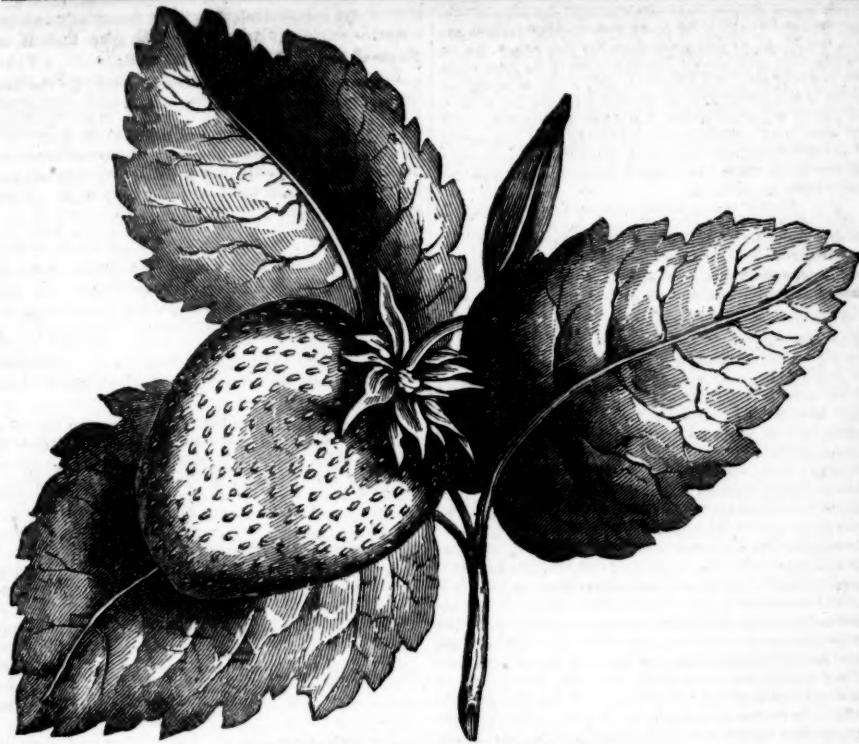
The President and First Vice-President to reside in Baltimore city or county; subordinate Vice Presidents elsewhere within the state; and temporary officers to preside at meetings, in the absence of the regular ones, to be chosen at such meetings, pro tem.

An Agricultural Library and Reading Room to be attached, containing all the prominent papers, writings, and reports, properly pertaining to the science—also a Refectory, where the farmer on business in the city, can procure a substantial lunch or dinner, at a low, fixed price, at any hour during the day. In connexion with these, a Standing Committee on invitations to be elected, for the purpose of enabling citizens of other Counties and States, and strangers in transitu, to partake of the intellectual and physical conveniences of the Club. Intoxicating liquors to be prohibited.

In furtherance of this purpose, a primary meeting will be held at the office of the **AMERICAN FARMER**, on **SATURDAY**, 13th of Sept. at 12 M. where farmers, aged and young, are solicited respectfully to attend.

Corresponding and Recording Secretaries of similar societies in other counties of Maryland, and other States, will confer a favor, by causing to be transmitted a copy of their constitutions and by-laws, respectively, addressed to the Editor of the “Farmer.”

Newspapers throughout the State, favorable to the cause of Agriculture, are requested to notice the foregoing.



### HOVEY'S SEEDLING.

**HOVEY'S SEEDLING STRAWBERRY.**—This fine variety, which was originated by Messrs. Hovey & Co., at Cambridge, near Boston, in 1834, and which has obtained the highest premiums of the Massachusetts, as well as many other Horticultural Societies, for several years, as the best, taking it altogether, yet seen, is now being cultivated in the neighborhood of our city, as well as in many other parts of the West, to a very considerable extent. Last fall specimens were exhibited by Mr. S. S. Jackson, at the Horticultural Show, measuring 5½ inches in circumference. It has been well described thus:—"Fruit very large, round, or slightly ovate, conical; deep shining red, paler in the shade; seeds inserted in a slight cavity; flesh scarlet, paler in the largest berries, and firm, a-bounding in an agreeable acid, and high-flavoured juice, not surpassed by any other variety; footstalks

long, and elevating the fruit from the ground, and every berry obtaining a good size; leaves large, and rather light green; vines very vigorous." The blossoms are chiefly all female; it must, therefore, be grown in rows, near to or alternate with the Iowa, Virginia Scarlet, or similar kinds, which will cause it to bear enormously. This must be allowed to be the most splendid and valuable of all Strawberries yet known to us. We look forward to the time when this noble fruit will form the chief strawberry in our markets, notwithstanding the Hudson, now becoming very common here, is considered, and we believe justly, the best and highest flavored. Another reason that it will be preferred to all others here by the market gardeners, is the facility it affords from its great size, of easy gathering.—*West. Far. & Gard.*

**TO DESTROY INSECTS ON TREES.**—John R. Cross, in the Boston Cultivator, advises those who have trees, shrubs and vines, affected by the ravages of insects, to drive nails or brads into the body or limbs thereof. He says, last fall he mentioned the experiment to Dr. Watson, of Newburyport, who took him to his garden, where last year a fruit tree was infested with the nests of caterpillar or canker worms as were his neighbors' trees, and showed him a board nailed for convenience of a clothes line upon one of the large limbs of the tree; he said he noticed a little while afterward that the nests on that limb dried up, and

the worms disappeared, though the cause did not then occur to him, though now apparent as it will be to any scientific mind.

Mr. Cross adds:—"Drive carefully well home, so that the bark will heal over a few headless cast iron nails, say some 6 or 8, size and number according to the size of the tree, in a ring around its body, a foot or two above the ground. The oxidation of the iron by the sap, will evolve the ammonia, which will, of course, with the rising sap impregnate every part of the foliage, and prove to the delicate palate of the patient, a nostrum, which will soon become, as in

many cases of larger animals the real panacea of life, *viz. Tomb.* I think if the ladies should drive some small iron brads into some limbs of any plant infested with any insect, they would find it a good and safe remedy, and I imagine in any case instead of injury the ammonia will be found particularly invigorating. Let it be tried upon a limb of any tree, where there is a vigorous nest of caterpillars, and watch it for a week or ten days, and I think the result will pay for the nails."

The efficacy of the remedy as above pointed out, seems to be confirmed by the following fact noticed in the Richmond Planter :

"A singular fact, and one worthy of being recorded, was mentioned to us a few days since, by Mr. Alexander Duke, of Albemarle. He stated, that whilst on a visit to a neighbor, his attention was called to a large peach orchard, every tree in which had been totally destroyed by the ravages of the worm, with the exception of three, and these three were probably the most thrifty and flourishing peach trees he ever saw. The only cause of their superiority known to his host, was an experiment made in consequence of observing that those parts of worm-eaten timber into which nails had been driven, were generally sound. When his trees were about a year old he had selected three of them and driven a ten-penny nail through the body, as near the ground as possible ; whilst the balance of his orchard had gradually failed and finally yielded entirely to the ravages of the worms, these three trees, selected at random, treated precisely in the same manner, with the exception of the nailing, had always been vigorous and healthy, furnishing him at that very period with the greatest profusion of the most luscious fruit. It is supposed that the salt of iron afforded by the nail is offensive to the worm, whilst it is harmless, or perhaps even beneficial to the tree."

Facts similar to the above we have seen published many years since, so that there is no novelty about the remedy ; however as the repetition of old things, when good in themselves, tends to spur up many a forgetful memory, we republish the above in the hope that it may lead to a sufficient number of experiments to test the efficacy of the remedy.

Mr. Cross terms it "a cheap and simple experiment for the preservation of trees, shrubs and vines from the ravages of any insects that subsist upon their foliage, fruit or sap." "Experiment" it may be, but whether it will prove a remedy, is another affair. If it really be effective, as the case alluded to by Mr. Duke would seem to imply, it has, as the writer observes, the quality of cheapness to commend it to favor.

THE NECTARINE—PEACH—THE "NAIL" REMEDY—CATLIN'S INDIAN METHOD OF TAMING HORSES—After the above was in type, we received the following valuable communication from an eminent Planter of S. Carolina—and as "in the mouth of two or three witnesses" every thing is to be established, the fact may be considered as settled, that the driving of nails into the peach tree, will, by the sap becoming impregnated with the salts of the iron, be found a remedy for the peach from the ravages of insects.

The other matters treated of in the communica-

tion of our correspondent, will be found of much interest.

"BEAUFORT, S. C. Aug. 6, 1845.

To the Editor of the American Farmer :

Having succeeded this season in raising the Nectarine, a fruit I have never before seen free from worms, and also the Peach under circumstances generally considered unfavorable, that is, in land highly manured with stable manure, it has occurred to me that our failure is often attributable to the exhaustion of the soil when we little suspect it. With us generally, young trees bear an abundance of fine fruit for the first 3 or 4 years, and then the fruit becomes small and full of worms. Trees however that happen to be near a kitchen, negro house, poultry house or stable, frequently continue growing and bearing long after the others placed under more favorable circumstances, have ceased to afford any fruit worth eating. With any thing else, we would immediately attribute the productiveness to the richness of the soil, but in the case of the Peach, we hunt far and wide for the cause, having been all educated in the belief that it requires a poor soil. Mr. Physick, in his application of salt and nitre, made a large step towards what I believe to be the true management of this tree, as nitre is a highly concentrated manure, and salt a powerful manure to many plants, of which the peach tree is one. I find my ideas recommended by the *Bon Jardinier*, for in the number for 1844, page 469, in the first section, on the cultivation of the Peach, it says, "une bonne fumure tous les 3 ou 4 ans;" which I translate a "good manuring every 3 or 4 years."

An acquaintance informed me the other day, that last year he drove 4 large nails into each of his peach trees except one, near the ground, the result of which was, that all the trees that had the nails were free from worms, while the one without the nails had its fruit filled with worms—and this year two trees that bore early fruit, being all that had ripened up to the time he mentioned the circumstance to me, bore fruit free from worms. I have also been informed upon good authority, that *Salt Mud* applied to grown trees makes them bear *very fine* fruit free from worms, but after that the trees are killed by the mud.

I have grown uncommonly fine vegetables of the following kinds, *viz.* Cauliflowers, Broccoli and Brussels Sprouts, and Cabbages generally, Norfolk Turnips, Radish, Mangel Wurtzel, and most kinds of Beet and Swiss Chard, Asparagus, Lettuce and Canteleopes, on a small island that is frequently overflowed by saltwater nearly as salt as in the ocean, as my plantation is in sight of the ocean and only about 20 miles from it by navigation.

I would also mention that last winter it occurred to me to try the Indian method of taming wild horses, mentioned by Catlin, of blowing into the nostril, upon a mare about 4 years old, that never had a rope upon her until the day before, and was only led about half a mile from one stable to another. She was very obstinate, but in about three hours, at the most, she would draw a log, harnessed with trace chains, quietly, and was quite broken and manageable, and never gave any further trouble worth mentioning, tho' I never had any thing personally to do with her afterwards. I remain, yours, respectfully,

REBT. CHISOLM.

THE UPAS—Mr. Hovey, in his visit to England, saw at the London Horticultural Society's Gardens at Cheswick, a very small plant of the celebrated Upas tree, so long noted for its deadly poison. It was in a healthy condition, and about one foot high.

## WORK IN THE GARDEN FOR SEPTEMBER.

Although there is not much to be done here, still there is something, and that something should be done, and "t'were well that it were done and done quickly."

*Cabbages.*—If you desire to procure for your family a supply of early Cabbages next summer, and it should be amongst the first wishes of your heart, you have still time to lay the ground work. So forthwith provide yourself with the proper kinds of *early* cabbage seed and sow bed on your border; at the proper time we will inform you how to set them out to stand the winter.

*Lettuce, Radishes and small salading of all kinds* may still be sown.

*Celery.*—As your celery progresses in growth, earth it up for bleaching.

*Strawberries.*—This is a good time for setting out a bed of this delicious and healthful fruit, and let no head of a family who may not already have provided his garden with one, omit to set out a bed this month—and the earlier the better.

*Gooseberries, Currants and Raspberries* may still be multiplied by cuttings and layers, and as the labor is trifling, let us hope that no one will forego the pleasure of providing his garden with as many of each of these kinds of fruit, as will afford his family a full supply next year.

**BUDDING AND GRAFTING**—From an excellent article in the Ky. "Dollar Farmer," we make the following extract:

"Propagation by eyes and cuttings," says Professor Lindley, "is the same as budding and grafting, with this important difference, that in the one case fragments of a plant are made to strike root into inorganic soil, while in the other they emit the equivalent of roots into living organic matter." In each instance the bud or scion must possess enough of alimentary matter and vital energy to sustain itself for a while, and to organise and emit that cambio-exudation from the extremity in contact with the stock, or soil, which in the one case mingling with a similar organism in the stock forms a union between the stock and the inserted bud or scion, and in the other is pushed forward into fibrous roots. Hence it is that vigorous shoots succeed best, and that two or even three-year old wood, in the cherry or other tender trees with a large pith in the young wood, are found preferable as scions to annual shoots, and annual shoots of well matured wood, two feet or more in length, preferable to the slender extremities of bearing branches in any kind.

An opinion has, to some extent, prevailed that the fruiting of young trees is hastened by the use of bearing wood as scions; we think, however, that the researches of that profound philosopher and successful culturist, Sir Thomas A. Knight, have established the fact, that no tree will do much at bearing until it has attained such a size or such a condition that the flow of the second sap ceases to cause elongation of its wood buds, or, in other words, until it ceases to have a vigorous fall growth, and that when trees have attained this size or condition those buds which are developed in spring as wood buds and which remain so a great part of the summer, are yet toward

the close of the growing season, by some unknown conversion of the second sap, changed into fruit buds. This change occurs at different periods in different localities, and is influenced to some extent in every locality by an early or late season. Its occurrence in England is near the latter end of August on many fruit trees. In this country, the result of few observations is known bearing on the subject, and yet it is a subject of great importance to the practical operator. It will be found that most of the ill success which attends budding is referable to the use of buds that have been partially or entirely robbed of their power of elongation by this change, for it is not alone those buds which show flowers that are lost to the operator; but many others push out a few leaves and then cease to grow.

At some pains we have gleaned from our correspondents the following facts, which we detail on account of the bearing they have upon the subject under consideration. Thos. T. Barbour, esq. a gentleman of Oldham co. Ky. distinguished for his success in raising fine fruits, is rearing the delicate cherries with success by grafting with two-year old wood, whereby he prevents the mortality of free growers upon small stocks budded or united above ground. Our enterprising neighbors, the Thompsons, have grown the peach 8 feet high in one season by grafting. Another correspondent tells us that his peach grafts have already this dry season, attained a height of from 3 to 4 feet, and that when the scions used were large they have succeeded well on vigorous stocks.

The latter correspondent has also furnished us with the result of certain tabular observations, made by him for the purpose of determining the propriety of using or rejecting the buds on fruit-bearing limbs, which result we will give in his own words. He says: "Observing, in 1843, that apricot buds, taken from newly formed branches or limbs, the spring shoots of which had been destroyed by frost, gave more trees than the average of my budded peach trees, I determined, in the fall of 1844, to bud partly from fruit bearing limbs and partly from young trees in the nursery. Accordingly, on about 800 trees, buds from bearing limbs were inserted toward the last of August. Of these 800 trees some varieties sustained a loss of 66 per cent.; some 100 per cent.; the greatest loss falling on those varieties whose leaves had lost their color of vigorous green and commenced falling before the buds were taken for insertion. On 500 trees, buds of the same varieties were inserted, taken from trees in the nursery. The loss on the nursery beds ranged from nothing to one-third—average loss one-sixth. On 100 other trees, budded with about 20 varieties, the buds taken from young trees and carried one-day's journey, average loss, one-fourth. Again, I budded apricots, in 1844, from trees of four different varieties. Three of these at the time of using were bearing trees, having dropped a large portion of their leaves; the buds of the fourth were taken from the middle portion of a shoot about 6 feet along, its point yet tender and brittle—The buds all adhered, and many are still alive. From the fourth variety, I have several trees; from the others, not one."

One other fact we glean from the mass of information we have examined. In June and July, 1843, one experimenter budded such of his peach trees as had failed in 1842. Many of these pushed in a few weeks, while others remained dormant, and, in the fall of 1843, were again budded with the same varieties taken from the same bearing trees. In the

spring of 1844 the operator was surprised to find his June and July buds putting out, many of them, vigorous shoots, without the appearance of a blossom among them, although the fall buds above them, on the same stocks, from the same trees, showed bloom to the extent of more than half their number.

We hope in the few remarks we have offered our friends will not only perceive the true cause of their ill success, but that they will at the same time be enabled to guard against its recurrence by the aid of some one of the numerous remedies or preventives suggested by the hints and experiments detailed.

We have been favored by the manufacturers, with the following, from one of the most eminent Planters of Maryland, testifying to the value of a new plow which they have recently introduced, for the cultivation of Tobacco.

#### DOUBLE BARRING AND RIDGING PLOW.

Eglington Farm, August 12th, 1845.

To MESSRS. R. SINCLAIR JR. & CO.

GENTLEMEN:—Your beautiful implement called by you "A Cultivator for barring or ridging Tobacco" came safely to hand, and is yet upon "Bowieville Farm," owned by R. Bowie, Esq.

In my opinion it is the best implement for the culture of Tobacco I have yet seen—it is the precise thing the Planter wanted. The land once well prepared and planted, the Tobacco requires a weeding out by the hoe; then this Barring Plow, and followed with your Tobacco Cultivator—a shovel with two teeth in front, now so generally used, and after a few workings with that, when it is required to be hilled, your "Barring Plow" will do the work most beautifully, by reversing the two small plow shears and converting it into a Ridging Plow, or small double mould board.—Its draft is no greater than a Cultivator requires. I am charmed with it—one man with this Plow, does the work of two exactly, with the common small plow—for, in the old way a plow had to pass twice in each row, by this plow but once, and both sides of the row is cut away and thrown in a small ridge in the middle, which was at the same time well worked by the Cultivator tooth, that works in front of the two mould boards—I can make no suggestion as improvement to it, unless it be to recommend you to make them 2 or 3 inches narrower, as they are rather wide, carrying the shears too close to most of the tobacco, as we seldom reach full 3 feet between plants, altho' we endeavour to have the rows that distance apart.

Considering it to be a *new idea*, it is the most perfect implement I ever saw, for I see no fault whatever about it except the trivial one above pointed out—You will of course have a wood cut made of it and placed in the *American Farmer*, for the benefit of planters. I can safely predict that every Tobacco Planter will have one or two of them as soon as their value is known, which must be appreciated by any who will see them work—it is a *great labour-saving machine*—It does its work well and neatly, and pulverizes the earth perfectly. I hope you will not neglect to have one fitted up for our next Agricultural Fair, which takes place the last Wednesday in October next.

I thank you gentlemen for the honor you did me in submitting this machine to me for trial and for my opinion, which would be worth *but little*, if it were not supported by the concurring testimony of R. Bowie, Esq., President of the Prince George's Agricultural Society, and James Mullikin, Esq. one of

the Vice Presidents; both of whom are gentlemen of high character and of established reputation as practical and successful planters. They were present when it was worked and were highly pleased with it, and are ready to certify to the same if it should be requisite. Yours, very respectfully,

W. W. BOWIE.

[A cut of the above plow will be inserted in the next Farmer.]

COTTAGE FARM, August, 1845.

To the Editor of the *American Farmer*:

SIR.—I regret to find an error in the summing up in my communication of June last as published; it occurred in transcribing and ought to have been corrected in your last number thus: "That land to be sown in winter grains ought to be well plowed when in proper order, and well settled by rain or the roller, previously to seeding, so as to assure the retention of moisture sufficient to cause a prompt vegetation of the crop when sown, and diminish the absorbent power of the soil," &c.

Professor Liebig says in substance that—"Plants are the primary source from whence man and animals derive their growth and support, and that inorganic matters are the food of plants"—the production of which essentially depends upon the art or business of cultivation, the importance and practical condition of which art he speaks of as follows:

"There is no profession which can be compared in importance with that of agriculture, for to it belongs the production of food for man and animals; on it depends the welfare and development of the whole human species, the riches of states, and all commerce.

"There is no other profession in which the application of correct principle is productive of more beneficial effects, or is of greater and more decided influence. Hence it appears quite unaccountable, that we may vainly search for one leading principle in the writings of agriculturists and vegetable physiologists. The methods employed in the cultivation of land are different in every country, and in every district; and when we enquire the causes of these differences we receive the answer, that they depend upon circumstances. *No answer could show ignorance more plainly, since no one has ever yet devoted himself to ascertain what these circumstances are.*" Fellow cultivators of the soil, this is characterizing us as the *creatures of circumstances* somewhat freely, in the 5,800th year of our profession.

Can we not by a simple application of the laws of nature wipe off the stigma and furnish a basis prepared in conformity with those laws, without which the addition of inorganic matter goes but a little ways in extending the products of the vegetable kingdom?

Does not "Cincinnatus" in the last number of the *American Farmer* betray some pretty strong symptoms of our ability to come up to the scratch, when after detailing his 16 inch subsoiling, he adds "besides securing a deposit for the absorption of all surplus moisture, if a wet, or in a dry season a reservoir of water to be evaporated by the sun," [heat as the drought progresses] which evaporation (to say nothing about the enriching salts of which it may be the bearer) would very far, if not entirely sustain a growing crop in drought, evidences of which may be seen towards the foot of the hills in many corn fields just now—strongly enforcing the necessity of deep cultivation, and the growth of the corn and washed condition of the surface up the hill

sides will as strongly enforce the necessity of top-draining or in other words, of controlling the destructive effects of the excess of water in heavy rains, an indispensable affair in hilly lands proposed to be improved or even saved from utter exhaustion, except in very deep rich soils.

D. W. NAILL.

## LADIES' DEPARTMENT.

**SWEETMEATS AND PRESERVES**—*By Mrs. A. F. A. F.*

These directions are intended for the making of those sweetmeats, alone, of the richest and finest quality, requiring the very best, and perhaps the most expensive materials. When so made, and as late in the summer as the ripening of the fruits will admit of, and kept in a cool dry place, they may be preserved through the hottest summers even of the South—otherwise there is danger of their undergoing an acetous fermentation. The requisites for those intending to follow these directions are, a kettle or kettles, a furnace, tin skimmer, steel balance or beam and scales, a supply of good hickory or oak ashes, and of charcoal. When any of these are borrowed, there is danger of the preserves not keeping!

**Peaches**—The best peaches for sweetmeats are clingstones, such as are of a pure white or yellow color *to the stone*. Those having any admixture of red are unfit for the purpose, as they will not keep. The late Newington is an excellent variety. The fruit, when not yet *fully ripe*, certainly not *soft*, must be picked by hand, so as to avoid all bruises. Having prepared a kettle of *very strong lye*, which is kept at boiling heat on the furnace, a sufficient number of peaches to cover the surface is dropped into it, and there allowed to remain until the *outer surface skin* begins to break, which, if the lye is sufficiently strong, will require *but a few moments*. They are then taken out—some one being ready to take them up, one at a time, and rub off the down scurf with a coarse rough cloth. When this is well done, the skin of the fruit will resemble that of the nectarine in smoothness—As they are thus cleaned (rubbed) they are at *once* dropped into cold water to prevent the discoloring effect of the lye. They are now carefully sorted; the most perfect, and those *with the skin unbroken*, are put aside for the brandied preserve; those for which slight specks may have been cut, or which may be otherwise imperfect, will do for the simple preserves—In order that those last may suffer no damage, whilst the others are in process of making, they are packed away with alternate layers of crushed lump sugar, in proportion of 4 lbs. of sugar to 5 lbs. fruit. They remain thus for 12 hours if necessary.

The fruit selected for the brandied preserve is now weighed. Take, say, 15 lbs. of crushed lump or loaf sugar, to which add water sufficient to dissolve it; beat up the whites of two eggs to a stiff froth, which with the shells broken up, add to the syrup. Let the syrup now boil freely for five minutes, carefully skimming off the froth that will rise; then strain thro' a linen napkin. This syrup, now perfectly clear and free from all impurities, is sufficient in which to boil 40 lbs. of peaches. Enough are put in the kettle, at a time, to cover the surface, and there kept at a steady boil for 15 minutes, each boiling being spread on a dish to cool, until all are boiled. The syrup in which the peaches are thus boiled, extracts so much of the juice of the fruit, that it will not answer to put them away in. But with the addition of a small quantity of spirit, it makes the richest cordial imaginable—a pure *ea de peche*, richer than the *ea de noya*. A fresh syrup is now prepared, in the

same manner as before described, of the very best loaf sugar, in the proportion of one measure of the latter to two of the former. The best spirit for this purpose is *pure Spanish brandy*, which may occasionally be had as colorless as water, and is at the same time mild. Peach brandy, and Scotch and Irish whiskey, are supposed to be too fiery. Fill the jars two-thirds with peaches, then fill up with this mixture. The jars must stand some four or five days unsealed that spirit may be added if the fruit rises to the top, which is a proof that the syrup has become too much weakened from the extracted juice of the fruit. They should not be used until about Christmas. This sweetmeat is certainly not strictly temperance in its constituents; but although neither wine nor brandy is used in Ingleside in any other shape, so truly delicious is this preserve, that I have always pleaded for its use being continued.

**Peach Preserves**—The fruit put away for this purpose has yielded sufficient of its juice to the sugar in which it was packed to dissolve nearly all of it; take out the peaches, and to the syrup add a small quantity of water; clarify and strain as before—then add the fruit; boil moderately and steadily from two to two and a half hours, according to the size of the fruit—when done, they will be transparent. If freestones are used, an incision is made on one side of the fruit, when the stones boil out in the syrup and are removed. Large cling-stones may be used, even if very acid, which they will be if red at the stone—they are cut in two, the stone taken out, and the fruit dropped in lime-water and allowed to remain about an hour, to neutralize the acidity and give firmness. Peach marmalade does not keep well in this climate.

**Plum Jelly**—The best fruit for jelly is our wild plum, far surpassing any other variety of plum, and even the red currant, so prized at the north. The fruit is gathered before it is fully ripe—when it has got its color, but is yet hard. When picked over, and washed clean, the kettle is filled with them, and water added until it appears at the surface, scarcely covering the fruit. They are boiled until the skin cracks; then carefully taken out and the whole put into a flannel bag, where they are left to drip until all the juice is had without crushing or squeezing the plums any more than can be helped. Prepare a quantity of syrup, as before directed, *very clear and rich*. Put in a six gallon kettle about a quart of syrup and plum juice, in the proportion of two measures of syrup to one of juice—in this the taste and judgment of the person making must be used, to determine the proportion. Have a clear charcoal fire in the furnace, on which place the kettle; allow the mixture to boil briskly for about 15 minutes—the best guide in this is a little experience. The great secret in making jelly, to have it perfectly clear and firm, is to boil a small quantity at a time, so that it may be done quickly. If boiled long, as must be the case when the quantity is great, the color will darken.

The plum here spoken of is a native of the South; and not, I presume, peculiar to this part of it; although I have never, in all my peregrinations, seen it elsewhere. The fruit has a singular dark red color, with a whitish bloom; larger than the damson; flesh coarse-grained, firm even to hardness, and excessively sour; skin tough and astringent; ripens in August; some trees retaining their fruit until after frost. The tree is of vigorous growth, and makes an excellent stock for working other sorts on.

**Plum Marmalade**—Take the plums from which the juice has dripped for making jelly, and add them to a syrup, made as before, in the proportion of one

part of sugar to two of plums. Boil an hour, until the syrup and pulp become one stiffish mass; then strain through a colander. Put the strained pulp again in the kettle, and boil until thoroughly done, stirring with a paddle all the while, and you will have a fine marmalade. The residue, left in the colander, is spread on shallow dishes and dried in the sun, then packed away in jars for making tarts.

Ingleside, Adams Co. Miss. American Agricul.

**To Cook Tomatoes**—He that does not love tomatoes is an object of pity. Every art of cooking should be employed to inveigle the appetite of every man to have a vegetable so wholesome.

Peel a dozen ripe tomatoes and fry them in a little sweet butter, together with two or three sliced green peppers, sprinkle on a little salt; and finally slice up an onion or two, and let the whole cook thoroughly. This is the Spanish method of preparing them.

Another method, which from a long experience we know will wear well, is as follows. The directions are for a mess of tomatoes amounting to about three pints when cooked.

Begin by parboiling two onions. While this is doing, peel a dozen tomatoes, which is easily done after hot water has been poured over them; cut them up and add the onions, also a teacupful of salt, a heaping teaspoonful of black pepper, a lump of butter of the size of a turkey's egg, or about four table-spoonfuls. Beat these thoroughly together, and set them over a slow fire, gradually to stew. *They should cook slowly and for a long time*—never less than three hours, but the longer the better. About 15 minutes before they are to be used, beat up six eggs and stir them in, and put them on fresh coals, and give them one grand boil up, stirring them all the while. When so cooked no directions will be needed how to eat them.

The art of cooking the tomato lies mostly in cooking them enough. They should be put to work the first thing after the breakfast things are out of the way, even if you do not dine till three.—*Indiana Far.*

**To PICKLE ONIONS**—Take off the outside skin, and "top and tail" them; then put them into bottles and add sufficient vinegar to cover them. Put also a few mustard seeds into each bottle and a blade of mace. It is said that a spoonful of salad oil to each bottle will keep the onions white.

**TOMATO CATSUP**—Cut tomatoes in slices, and on every layer sprinkle a little salt; let them stand a few hours, then add a little horse-radish, garlic, pepper, and mace; boil well and strain, then bottle, cork and seal for use.

**BED BUGS**—Paint the bedstead with a good coat of verdigris, or merely paint the tenons, mortices, joints, and holes through which the cord passes. Be careful that the inside of the holes be thoroughly bedaubed, and have a good coat, as the rough wood will absorb much paint. Then besmear profusely the joints and holes with "unguentum," and put it together; and, if thoroughly done, bed bugs will not inhabit it for fifteen years, if ever.

**BLACK ANTS**—To get rid of these troublesome fellows, a writer in the Piscataquis Farmer says, he dissolved half a teaspoonful of tartar emetic in two teaspoonsfuls of hot water, and mixed it with some molasses, and put it where they could doctor themselves. The result was, they all cleared out he supposed, perfectly cured, as he has not heard from them since.

## FLORACULTURE.

### THE FLOWER GARDEN—SEPT. WORK.

**Carnation and Pink Layers.**—These should now be taken off with about half an inch of the stalk which connects them to it, and be immediately planted in small pots, filled with a compost consisting of one half fresh, sound, loamy earth, taken from the surface of a rich pasture ground, turf and all, and not more than four or five inches deep, one third of old horse dung, and the residue of coarse river sand. These ingredients should be well mixed together, and let stand a week or so before being used. The plants when transplanted in the pots should be placed in a shady place, and moderately watered.

**Perennial Herbs.**—Herbs of this kind may be transplanted any moist time this month.

**Weeding.**—See that all the beds requiring it, be well weeded,—and with this last advice, permit us to express the wish which we feel, that all your labors, whether on the farm, or in the garden, may not only prove successful, but be conducive to your own comfort and that of your family.

**DAHLIAS**—In the Gardens of the Luxembourg, at Paris, the Alpine strawberry is cultivated very extensively for the supply of the royal tables throughout the whole summer and autumn; the plants are set out in long rows, with alternate plantations of Dahlias, a great many of them of the *fancy* sorts, which are greatly admired and extensively cultivated in and around Paris; one of the finest is the Beauty of England, purple tipped with white, and every flower distinctly marked.—*Mag. of Hort.*

**RARE FLOWERS**—The Washington "Union" states that the green-house attached to the Patent Office at Washington, contains a variety of beautiful exotics brought home by the Antarctic exploring expedition. These are under the charge of Mr. Brackenridge, who went out with Captain Wilkes as botanist and florist. Among those enumerated are the celebrated Pitcher Plant of the tropics, and the Night Blooming Cereus. The length of one of the latter flowers is stated at 12 inches, and the width over the petals more than 8. This plant, the *Cereus Grandiflora* of botany, is a native of South America. In its delicacy of odour, and rich contrast of golden and silver petals, it is unsurpassed in the floral ranks. Its bloom is however as evanescent as the hour.

**BELL GLASSES**—Those who have never used bell glasses to assist the germination of their seeds, or the successful result of transplanting tender annuals, &c. can hardly imagine the immense advantage which their use affords. We have seen the operations of a few, procured this season by a gentleman near the city, and the rapidity with which a seed is made to germinate, when sown and protected by a bell glass, is matter of astonishment, only four days being required from the sowing the seed to have the plant up and with its third leaf formed. Every private gardener should have them, and public market gardeners we doubt not would find them profitable.—*Cleveland Herald.*

**To improve bad Yeast**—Add a little flour and sugar, and let them work together for a short time.

## THE VINEYARD.

For the *American Farmer.*

About eight years past, I planted a Vineyard at Clairmont Nursery, which has been much neglected until this season, but now hangs full of grapes. It is about four years since I made about two barrels of wine from said vineyard, which was highly approved of by many persons who tasted it; a sample of it can be shewn yet. To see the rapidity of growth of these grapes, and the abundant crop now on these vines, is very encouraging to cultivate them largely, for either wine or table use, not doubting from my experience, that it may be made as profitable a crop as we can cultivate, as a little practice will enable us to make as good wine as any we can import, and the sample of my own making, which was my first trial, will be shown to inquirers as proof of what I say. It has been satisfactorily shown to me, that 400 gallons of good wine can be made per acre, and when once well planted and taken care of, it is there for a hundred years.

I have tried many sorts of European and American Grapes, and now give a decided preference to the well known Catawba grape, either for wine, table, or ease of cultivation. My vineyard contains about 160 perch in rows of grape plants, about 7 feet apart. But I approve of Maj. John Adlam's plan, of planting his rows: first, two rows 5 feet apart, and the next two 10 feet apart, which enables the owner to cart in manure, which will be wanted occasionally. Maj. Adlam, of Georgetown, published a work in 1828, on the raising of the Grape and making of Wine, which contains much valuable information—he in addition to 30 years experience, had collected from European writers much very useful matter, and gives it as his decided opinion, that in this climate we can make better wine, and with less labour than it can be made in Europe.

By a little experience the knowledge of cultivating the grape is simple, and easily acquired. It would afford me pleasure to show my vines, and give any information in my power to any person about to plant.

ROBT. SINCLAIR.

**THE CATAWBA GRAPE**—The committee of the Cincinnati Horticultural Society, appointed to examine the specimens of Wines produced in the neighborhood of that city, in their Report, give a table of 39 different specimens, with the following remarks :

“ The result of the examination is a conviction on the part of the committee, that our soil and climate are well adapted to the production of a very fine, delicious wine; and that the Catawba grape is the species which yields the finest qualities. It will be seen that the greatest number and variety of the specimens examined were from the several vineyards of N. Longworth, esq. who has been longest engaged in the cultivation of the vines, and in the manufacture of wine. Mr. Mottier, and Jacob Resor, esq. who have lately acquired a good reputation in this department of horticulture, were next to Mr. Longworth in the number and variety of the specimens furnished. These, with the single specimens of Dr. Flagg, and the two specimens of Dr. Smith, confirm the opinions of the committee, that the pure juice of the grape, when judiciously managed, will furnish the finest kind of wine, without any addition or mixture whatever; that no saccharine addition is necessary to give it sufficient body to keep for any length

of time in this climate. In confirmation of this opinion, we would state that two of our German friends who were present, informed us that they had taken, on different occasions, specimens of the wine of this county to Germany, and submitted them to the judgment of various connoisseurs in that country, by whom they were highly approved—the principal, or only objection being that they were too strong to compare with the fine kinds of the lightest German wines. A taste for the wines of this region appears to be well established, since all that can be produced finds a ready market at good prices; and the committee are of opinion, that the period is not distant when the wines of Ohio will enjoy a celebrity equal to those of the Rhine.”

The editor of that admirably conducted journal, the (Cincinnati) Western Farmer & Gardener, in a visit to the garden of Mr. Mottier (now Mr. Sleath's) one of the gentlemen above mentioned, remarks :

“ Here we observed the extensive vineyards of the Catawba Grape getting in fine order, and a system of such judicious pruning adopted (one of the greatest difficulties in the whole science of horticulture,) as cannot but ensure a fine and large crop to the owner, if nothing should occur otherwise to mar the harvest. The finest kinds of Strawberries are cultivated around the vines with a great promise of fruit, Mr. Sleath being of opinion that they are rather beneficial to the Grapes than otherwise, preventing a too great evaporation from the soil. We must not omit to mention that we rather more than tasted a very fine and pure wine made on the premises from the Catawba Grape, and having very much of the flavor of choice Madeira, the strength of whose spirit had been chastened, or made soft, by a voyage or two to the East Indies. We are seldom in the habit of taking any fermented liquors of any kind, but we found no results from the taking moderately of this wine, other than those of pleasant and healthy sensations; and we think that if people must take any thing of the sort, pure and light wines, diluted or otherwise, made from our Native Grapes, will prove most beneficial to them, and even have a tendency to do away with those excesses of this description in the country which are so much to be lamented by every well-wisher to his species. Probably the pleasant gusto yet remaining on our lips by recollection, of this production of our own soil, may have induced us to say more than we ought in recommendation of an article that the young, at any rate, can do without; but if we have done wrong to the temperance cause, let it be charitably attributed to the weakness of our carnal appetite in this instance.”

**HYBRIDIZATION**—This is highly interesting, even if we fail in making good *better*. One great point, which may be attained in this way, is the possibility of being able to produce hardy fruits, where the parents are tender. It would be a great point gained to produce a grape, for instance, with the many good qualities as the Isabella, and yet somewhat similar to the Black Hamburg. In a letter in Hovey's Magazine, a correspondent states, that he has succeeded in fertilizing the Black Hamburg with the pollen of the Isabella, without failure. The bunch of grapes, ripened to perfection, were of great size, and most delicious flavor. From this seed, he has a dozen plants, fine and handsome. He anticipates good results, when they bear fruit, and will make them known as soon as possible.—*West. Farm. & Gardener.*

## THE DEVON COW.



The above is a portrait of a cow belonging to Mr. Western, a distinguished English breeder, and was a *life-picture* of the Devon Cow, when it was taken some years ago; and although an improvement has since been made in breeding, particularly in producing a straighter back, and in reducing the head at the base of the horns, still it is spirited, true to nature, and so just in its general delineations of character, that any one who may see it once, would know a Devon cow where he to meet her in the deserts of Arabia, tho' he had never seen one before.

We have on file and will shortly present to our readers, a full description of this breed of cattle, its history, &c.; which we hope to be enabled to accompany with a portrait of a fine bull in a herd near this city; and we will here remark, that, for Southern climates and pastures, the Devon is better adapted than any other of the improved breeds. We are aware that great mortality have attended all the importations of improved cattle into the Southern states, but we do think, if yearlings only were introduced there, and these were withdrawn from the wet pastures in early summer, and kept in well shaded, sound dry lots, or under cover, until frost, the first year or two, that the loss might be greatly diminished. To enable the Southern planters to sustain such animals, it will be necessary for them to have a lot of a few acres near their cattle shed, *to enrich it with manure, and lime and marl*, and sow clover, lucerne, and millet, to cut and soil such stock upon. Some two or three acres thus managed, would afford an ample supply of green food for the purpose. In addition to this treatment, it would be well to keep, at all times, a trough accessible to their stock, in which equal quantities of *salt* and *tar* were placed; to be sure that a full supply of pure water were given to them, thrice a day, and that they occasionally received powdered charcoal mixed with a little salt and meal.

## RARE COWS IN THE WEST.

We frequently have accounts from the East of great milkers and butter cows. We can now and then produce animals here remarkable for their productive qualities. We lately saw a cow belonging to Dr. Jacob Hoffner, of Cummingsville, of the part Patton and Durham stock, (the Durham from the importation of 1817,) which goes beyond even what her promising appearance, and particularly the enormous size of her finely shaped udder, would indicate, giving, for length of time, without pushing, or any other food than grass, thirteen and a half pounds of butter a week. Dr. Martin, of Kentucky, had a cow, now dead, which yielded, with very high keep, forty-two quarts of milk per day, for two months after calving. This cow, too, was of the Patton and Durham stock mixed. Mr. Hoffner's cow gives a very large quantity of milk within two weeks of calving. We know, too, of a cow in Newport, Kentucky, of the same breed as the two above named, which gives for six months after calving, eight gallons of milk a day.—*Western Farmer and Gardener.*

## BAITING A RAT TRAP.

To the *Editor of the "Farmer"*—Your notice in the July No. of an efficient Rat Trap, has induced me to give you information as to the manner in which the common wire cage trap may be made far more effectual in trapping the vermin than is usually the case. Bait the hook as usual with bacon or other meat, then sprinkle a few oats or wheat on the wooden floor. In this manner, two, three or four are taken at a time; the reason I think is, that the old rats do not hesitate to go in to eat the oats, and these are followed by younger ones—the latter either venture at last to touch the bait on the hook, or the trap being a little crowded, they run against the bait. Somehow or another it is my luck to catch a great many—this I never accomplished before, when baiting only the hook.

July 22, 1845.

R. S. FENNER.

THUNDER STORMS—We have had several heavy gouts during the past month, and we notice that a number of barns in the upper part of this state, and its vicinity, have been destroyed by lightning, together with their valuable contents, the fruits of the year's toil of the husbandman.

PEACHES—This delicious fruit has never been so plentiful in our market as it has been the present season; the better qualities have commanded very good prices.

SOUTH-DOWN SHEEP—A few EWES (say 20) of pure blood, are wanted at a reasonable price. Any one having such of good quality, may perhaps find a purchaser by addressing "F. A." (post paid) at this office.

To  
show  
the  
far  
am  
evid  
ne  
yea  
no  
my  
of t  
the  
ho  
the  
wi  
ers  
the  
we  
doe  
dro  
that  
back  
I  
ord  
den  
gen  
prac  
pri  
B  
the  
by  
1844  
fect  
nour  
wet  
two  
tow  
num  
seve  
es a  
prom  
cho

M  
ting  
28th  
wha  
hors  
migh  
than  
when  
ers to  
neces  
O  
used  
ard  
Stran  
in the  
purc  
work  
ed, th  
in or  
New  
was v

## Agricultural Implements.

### HUSSEY'S REAPER.

To the Editor of the American Farmer :

Having often had the privilege of recommending my Reaping Machines in your valuable paper, I should hesitate to trouble you farther, were it not for the increasing interest manifested every where by farmers to get correct information on the subject. I am well aware that what I may say unsupported by evidence, will be about as valuable as self-praise generally is; but the evidence from all quarters this year is of the most favorable character. Harvest is now over, and accounts of the great performance of my Reaper reach me every day. John Shellaber, esq. of Dixon, Illinois, writes me that the performance of the Reaper which I sent to him exceeded his highest hopes. Mr. J. Locke, of Oldham co. Ky. writes that the operation of my Reaper delighted every one who witnessed it, and the field each day had many visitors, both ladies and gentlemen. After mentioning the fact, that several of Mr. McCormick's reapers were at work all around, Mr. Locke says: "We had documents in the house stating that McCormick's machines drove yours out of the field in Virginia. I can testify that yours has driven his out of the state, for his are sent back to Cincinnati, while yours I shall retain."

I could multiply such extracts, but I forbear, in order to give entire a letter of John Jones, esq. President of St. George's Agricultural Society, Del. This gentleman is the largest wheat-grower in his state, a practical farmer of unsurpassed energy and enterprise.

Before closing these remarks I will announce to the public that the machines referred to above, and by Mr. Jones in his letter, are of the improvement of 1844; but before the close of this last harvest I perfected a very important improvement, which is pronounced to be an entire remedy for the choking in wet grain. The experiment was conducted through two days' cutting, by Mr. Wm. Butler, of Shepherdstown, Jefferson co. Va. in the presence of a large number of farmers, the most of whom had been for several years well acquainted with all the advantages and faults of my Reaper. The improvement was pronounced by all to be an entire remedy for the choking in wet grain.

#### Mr. JONES' LETTER.

Wheatland, Del. July 21, 1845.

MR. HUSSEY—Dear Sir: I have just finished cutting my oats; I finished cutting my wheat on the 28th of June, having cut over 160 acres, excepting what was cut by a cradle in opening tracks for the horses and rounding the corners so that the machine might sweep round without loss of time in turning, which it did with ease and certainty, cutting more than 20 acres a day on an average. A part of the wheat was so heavy as to require three active shockers to keep up with the cutting; the whole cost of all necessary repairs 31½ cents for the harvest.

Of the two machines which I purchased of you, I used the large one, having sold the small one to Richard Millwood, who rents the farm of Dr. Noble.—Strange as it may appear, I could find no *landholder* in the vicinity who had enterprise enough to risk the purchase of that machine until they could see it work; but after the performance was once witnessed, the impression it made was such as to justify me in ordering you to have ten ready by next harvest for New Castle county, Del. Mr. Millwood's wheat was very heavy, one measured acre having 60 dozen

sheaves upon it, and the whole cutting time on the 40 acre field was but two days, making for the small machine a full average of 20 acres per day, without any repairing or accident. None of the hands who worked it had ever seen such a machine before those you sent to me. My crop has not all passed thro' the half bushel yet, but it will fall but little short of 3000 bushels—I expect it will all be in market tomorrow.

In conversation with Col. Vandergrift, the present owner of the reaper you sold to the St. George and Appoquinimic Agricultural Society in 1838, he told me that he had cut about 700 acres of wheat and oats with it since he owned it, and up to that time the cost of repairs had been \$1.25 for every hundred acres cut. It was then in good repair.

Yours,

JOHN JONES.

I will, Mr. Editor, farther trespass upon your kindness by asking permission to give the following additional evidences of the performance of my Reaper in the "Old Dominion," signed by a number of the most respectable farmers of that garden spot of Virginia, Jefferson county; and another by that extensive landed proprietor, Jno. R. Dall, esq. President of the Bank at Williamsport, Washington co. of our own State:

JEFFERSON COUNTY, Va. Aug. 9th, 1845.

To Mr. Obed Hussey—Dear Sir: We the undersigned having used your Reaping Machine during the recent harvest in cutting our respective crops, take great pleasure in tendering to you this voluntary testimonial of the very high estimation in which we hold your invention. We have now tried your machines fully and fairly, and we are unanimous in the conclusion that in every case they have borne the test in a manner which has excited our highest admiration of their merits—We were particularly pleased with their work in lodged grain; they cut and gather every straw with the utmost ease, and the only fault at all that we have had to find with them was that they did not cut wet grain with facility; this single defect however we are pleased to perceive you have completely remedied with the late improvement (with open guards to the knives, &c.) which the most of us saw at work in Mr. Wm. Butler's field cut wet grain and green oats as well as could possibly be desired—it will also cut timothy and clover—so that now we have no hesitation in recommending your Reaper, as we hereby most cordially do to our brother farmers as the most complete and efficient in agricultural operations, and as one which, whilst from its simple and substantial construction, is not liable to be broken or to get out of order, will at the same time save its owner the first year more than its original cost.

W. M. BUTLER,	W. G. BUTLER,
J. H. TAYLOR,	JAS. S. MARKELL,
W. SHORTT,	V. M. BUTLER,
JOSEPH M' MURRAN,	ANDREW M' INTIRE,
DANIEL G. HENKLE,	ADAM SMELL,
DAVID L. HENSELL,	GEORGE TAEB.
JOHN MARSHALL,	

WASHINGTON COUNTY, Aug. 7, 1845.

I hereby certify, that I have used Mr. Obed Hussey's Wheat Cutter through the late harvest and that it answered my fullest expectations, in every respect, except that it will not cut when the wheat is damp from rain or the dews of the morning. I cut 140 acres of wheat with it in 9 days; and on one occasion, cut off 30 acres in 18 hours, from day light in the morning until 11 o'clock the next day, and with the same 4 horses, never having changed them during that time.

JOHN R. DALL.

For the *American Farmer.*

### BORROWING & LENDING—PLOUGHING.

MR. EDITOR—Absence from home has hitherto prevented me from noticing the new dress and character of our old friend, the "*American Farmer*"—it befits him, and I shall welcome his monthly visits with pleasure, and sometimes, perhaps, commune with him as of yore. And to begin

I am not sure that I altogether approve the doctrine of your correspondent, "*Patuxent Planter*," No. for July, page 11, where he recommends "never to borrow and seldom lend." As a general rule, I would not borrow, but to lend to a neighbor or a person in need, oh! that is pleasure I can't afford to lose, having been taught from childhood, and from the blessed book, "it is more blessed to give than to receive, hoping for nothing again," calculating that by so doing we are "twice blest."

I am so unfortunate also, as to dissent from him on the subject of the Centre-draught plough; for after cordially agreeing with him in the fact that "there is no plow known in this country to equal the 'Prouty & Mears' centre-draught" for beauty of work and pulverizing the soil," I contend that it is equally as efficient in the hands of a colored man as in that of a white ploughman, and this after three years experience. It is true, I am my own overseer, and all I have to do is to see that it is "all right," when it is only to "go ahead;" for when, by the admirably contrived gearing, I have fixed the clevis to take just the width of furrow I want, and by the wheel, the depth, to the sixteenth part of an inch, screwing all up tight, I am in no fear of my ploughman skimming the surface in my absence, even if he had a mind so to do. Why, man, it is for this reason, expressly, the "*Negro Plough*," and precisely adapted to do the work you put it to, without the possibility of disarrangement. And this reminds me of a visit which I paid to John Reybold—that Prince of Peach growers in Delaware, the Major, his father, being King in that department of Agriculture—where I found two colored boys of 14 or 15 years of age, ploughing between the peach trees in an orchard of a hundred acres, and guiding the No. 5 $\frac{1}{2}$  Prouty & Mears so as not to touch the trees, doing away the old-fashioned out-riiger, the wheel and rod performing to admiration, keeping the depth and width of furrow like a clock, even in the hands of such lads. If your correspondent will see that the edge of the cutter of his Centre-draught—if he is so fortunate as to possess one—stands in exact line with the breast of the plough, coming no lower down than within 4 inches of the point of the plough; which can be regulated by passing a straight edge along the land side of the breast, when the edge of the coulter must stand parallel to it, and that the wheel is on and in workable order, keeping it oiled, my life for it, Mr. Editor,—but I forget, there is no question between us as to the real merits of the Centre-draught, for I fully agree with him that there is no plough in this country to equal it in the hands of a competent person, so no more remains to be said upon that subject, only my neighbor H. ploughed 2 $\frac{1}{2}$  acres of sod ground per day with one of the 5 $\frac{1}{2}$ , in the hands of a colored servant too, in a way that surprised me, who content myself with a little more than half that quantity of land per day. But I shall be glad to hear from him again, on the subject of "borrowing and lending," which I conclude he is competent to advocate, wielding as he does, "the pen of a ready writer."

Z.

Baltimore County, 14th Aug. 1845.

[BY REQUEST.]

### TRIAL OF THE CENTRE DRAUGHT PLOW.

MR. JAMES PEDDER, general agent for the sale of Prouty and company's CENTRE DRAFT PLOWS, brought to this city in May last a number of these Implements. They being but comparatively little known in this vicinity, several persons were desirous that a public trial should be made with them under the supervision of a judicious and impartial committee. This was more especially wished, as an unfavorable report had reached this country in regard to the performance of this plow, and that of Messrs. Ruggles, Nourse and Mason, at the exhibition of the Royal Agricultural Society of England last year. The work of the American plows at this trial was represented as *decidedly bad*—a result for which we are wholly unable to account, except on the ground of the plowmen not being well acquainted with the somewhat peculiar construction and operation of these plows. We have seen the operation of several of the most celebrated English and Scotch plows, which have been brought to this country, among which we will name that of the celebrated Ransome plow, which received the highest prize at the English trial referred to. With the exception of this, we are confident we have seen no imported plow, which, everything considered, can be deemed equal to the American plows mentioned. The Ransome plow which we saw, was imported a few years since. It is unquestionably a good one. Some late improvements are said to have been added, of which we cannot speak. We know not what would have been the result of a comparative trial of this with the best plows made in this country; we however hope that such trial will yet be made—but at present we can only express our concurrence generally with the conclusions of the committee in regard to the work of the Centre Draft Plow, as set forth in the following report:—*Albany Cultivator.*

#### REPORT OF THE COMMITTEE.

We whose names are underwritten were solicited to examine the Centre Draught Plow and witness its performance, at the farm of T. Hillhouse, Esq. The performance of this duty was certainly far from being courted by any one of us. But having been selected for that purpose, it would have been uncourteous to have declined; and having performed the duty, it is incumbent upon us to report the result of our examination. We have no desire, we must state in the onset, unduly to magnify the Centre Draught Plow, nor to praise unduly its performance. Neither can we be prevailed upon (even if desired so to do) to undervalue all or any of the various new and improved plows now before the agricultural community, which are brought in competition with it. But we nevertheless willingly report truly and fairly the facts in the case.

The committee are almost strangers to each other—inhabitants of different parts of the state—chiefly, if not entirely, practical men, and accustomed to use (and prejudiced in favor of) other plows. Yet, with entire unanimity, we concur in the opinion that the Centre Draft Plow is not surpassed by any plow with which we are acquainted. The work performed by it is equal in excellence to any thing we have ever seen, and performed with as little labor and fatigue by both plowman and team, as it could, in our opinion, possibly be done.

Perhaps nothing more than the above need be said, as it comprises in general terms all that we can say, or that it can be desirable to say. However we will add:

This plow can be adjusted with the greatest nicety, both as respects the depth of the furrow and the width of furrow slice, with perfect facility and ease.

We are quite sure that it runs very light and is of course easy for the team. But we did not make any trials with the dynamometer, and therefore are unable to make any comparative statement, between the draught of this plow and that of others. All we pretend to offer upon this point, is the result of our observation upon the apparent effort and fatigue of the team; a conclusion which can be relied on to some extent, though we admit, far from being conclusive. We however would remark, by the way of fortifying our opinion, that at the celebrated trial for plows, made at Worcester, a year or two since, this plow bore off the premium of one hundred dollars, after a very severe competition with some of the most celebrated plows. So far as the plowman is concerned, we can with certainty assert, that severe labor and strenuous effort on his part is almost entirely done away. Even skill is comparatively useless in working with this plow.

This may seem a strong position to take; but in confirmation of it we must state, that we saw furrow after furrow ploughed with great nicety, the hand of the plowman having been laid to the plow only to enter it at the commencement of the furrow. As to the style of work performed, we can only say, that some of the plows lap the furrow slice, (and they are those which we prefer,) and to which our report mainly refers, while others (the one of which the one hundred dollar premium was awarded at Worcester,) turns the furrows flat.

The workmanship of the plow is excellent, and we beg specially to commend the casting of the share from a composition which is much harder than ordinary cast iron, thus ensuring a great degree of durability to the plowshare. If to this it be added that the share is also constructed upon the self-sharpening principle, it can easily be conceived that the purchasers of these plows are ensured against the too frequent recurrence of the vexation that results from the rapid and often unexpected wear of the share.

In conclusion, we would remark that this plow has obtained great celebrity, and has received and is daily receiving the cordial approbation of men whose opinion have far greater weight than ours. We believe that it has lost none of its celebrity by the trial which we witnessed, for out of the numerous company present, there was not one who did not seem to be both surprised and delighted with the performance of the plow.

It may be asked how it comes that both this plow and the Worcester county plows, Messrs. Ruggles, Nourse & Mason's, were condemned at the fair of the English Agricultural Society last year. Nor is it easy to answer the question. Prejudice, national prejudice, may have had something to do with it. All we can say is, that some of the committee at least were practical men, we have reported only that which we saw. Moreover, there was present on the ground an English plowman, recently arrived, whose judgement was perfectly unbiased, who pronounced this equal to any English plow he had ever handled, and fully concurred with the committee in the opinion expressed by them.

J. B. NOTT, Albany Co.  
T. HILLHOUSE, "  
J. McVEAN, Monroe Co.  
C. HANNAN, Gedeseec Co.

#### BERKLEY CO. VA. AGRICULTURAL SOCIETY.

The farmers of Berkley County, Va. met at the Court House in Martinsburg, on the 2d ult., and formed an Agricultural Society. The meeting was organized by calling Col. Edward Colston to the chair, and appointing Daniel Burkhardt, Esq., Secretary.

The meeting being organized, *Charles James Faulkner*, Esq., arose and stated the object of it was to form an Agricultural Society, and, as the Martinsburg Gazette states, made a highly interesting address, which, from a knowledge of his capacious mind, zeal in behalf of the agriculture of our country, and devotedness to the interests of the Ancient Dominion, we can very readily believe, for there are but few, if any gentlemen in our Union possessing greater scope of thought, more enlightened views, or who are impelled by loftier desires to do the state good service.

Of Mr. Faulkner's address, the editor of the Gazette, thus speaks:

"Mr. F. took a view, 1st, of the soil, climate, geographical position, public improvements and markets of the County of Berkley, and urged the strong considerations which they held out to the farmers of this County to embark in an energetic system of Agricultural Improvement. He expressed his deliberate opinion that the county of Berkley possessed every advantage to place her in the first rank of the best improved farming districts of the Union.

2dly. He presented to the meeting some interesting details and views of the value and properties of the different limestone rocks in the County, and of their uses and adaptation to agricultural Improvement.

3dly. He called the attention of the meeting to those despised and neglected beds of White and Grey Marl which are to be seen in any portions of the County. He ascribed their existence to the gradual deposit, through a succession of ages of the lime held in solution by the limestone springs. He laid before the meeting specimens of this marl, and by the test of *Acids*, showed the large amount of carbonate of lime which they contained. He ventured to predict that the time would come when these marl deposits would be held in high esteem by the farmers of the County. They constituted an admirable *compost*, prepared by the hand of nature, to remedy those deficiencies which were most striking in our clay soils—combining as those deposits did, large deposits of sand and lime.

The above constituted the principal points of Mr. Faulkner's address, and will direct themselves with force to the mind of the intelligent reader."

At the conclusion of his address, Mr. Faulkner moved a preamble and a series of Resolutions, which were unanimously adopted. The Resolutions contemplate a temporary plan of organization, it being the intention of the Society to adopt a more definite one, so soon as an act of incorporation can be obtained from the General Assembly of Virginia.

The Resolutions provided that the Association shall be called "*The Berkley Agricultural Society*," that the officers shall consist of a *President*, four *Vice Presidents*, a *Treasurer*, a *Recording and a Corresponding Secretary*, and an *Executive Committee*—that it

shall be the duty of the latter body, after an act of incorporation shall have been obtained, to prepare and lay before the society at its next succeeding annual meeting, a plan of a Constitution and a system of By-laws and regulations, for its future permanent government—every citizen of the county on subscribing his name and paying the sum of *One Dollar* is to be considered a member of the Society—that the executive committee be authorized to subscribe for the *Farmers' Library*, the *Albany Cultivator*, the *American Farmer* and the *Richmond Southern Planter*, which publications are to be preserved by them for the use of the members of the society—that it be recommended to each member of the Society to subscribe for “some one of those cheap and valuable Agricultural papers which are distributing so much useful information over the country”—that the local papers of the county be requested to devote a limited space in their columns to the publication of agricultural matter—that the meetings of the society be held on the 4th Thursday in October in each year, the exhibition of stock the coming October, in consequence of the shortness of the time, to be omitted; an *Address*, however, is to be delivered upon that occasion—it is made the business of the Executive Committee to examine all farms presented for the premium “for the best improved farm,” or to appoint a committee of three from the Society, for that purpose.

On motion of Mr. Faulkner, distinct committees were appointed, to prepare Analyses of the principal soils of the county—to report on the value, as an Agricultural manure, of the *marl*, which is found in such large quantities in several sections of Berkley County—to report on the value of *Lime*, as a manure, adapted to the soil and productions of the county—to report on the best varieties of *Red and White Wheat* adapted to its soil and climate—to report on the best varieties of *Indian Corn*, as adapted to its soil and climate, and on the most judicious mode of cultivating that crop—to report on the comparative advantages of *deep and shallow ploughing* for spring crops—and on the adaptation of the *Slate* and mountain lands of the county to *Sheep husbandry*.

Each of these Committees were filled with the names of practical, experienced, and intelligent farmers, and we shall look forward with confidence and hope that the fruits of their labors will result in the most solid advantages to the farming interests of Berkley county, directly, and, by consequence, to the State at large, as the light thus to be diffused, will, like the ripple caused by the dropping of a pebble in the ocean, extend onwards until it reaches the entire body of the good old commonwealth. The subjects of inquiry and investigation, as prescribed for these several committees, are wide in their range, and embrace topics of the deepest interest to the farmer.

We hail this beginning of the good people of Berkley, with the liveliest emotions of unmixed pleasure, and from the deepest well of our heart wish, that their labours may be crowned with success; for if any people deserve it, it is those who

associate together to improve the productive resources of their country, thus increase the necessities of life, and thereby add to the motive in the human breast, for thankfulness to that Almighty Being, to whom we are indebted for all that is good of earth.

The following gentlemen were appointed officers of this Society for the ensuing year, viz:

**PRESIDENT**,—Col. *Edward Coulston*.

**VICE PRESIDENTS**,—*Alfred Ross, Andrew W. Mc Cleary, Israel Robinson and Allen C. Almond, Esqs.*

**TREASURER**,—*Daniel Burkhart, Esq.*

**RECORDING SECRETARY**,—*Harrison Wait, Esq.*

**CORRESPONDING SECRETARY**,—*John S. Harrison*.

**EXECUTIVE COMMITTEE**,—*Charles J. Faulkner, Jas. S. Brown, D. H. Conrad, Edmond Pendleton and Adam Small, Esqs.*

**Cure for Lock-jaw**—A writer in the Boston Cultivator having seen two accounts of the recovery of horses from that dreadful disease, Lock-jaw, by a plentiful application of cold water along the back, the streams being poured from above, adds a third case taken from Lorain's Husbandry, “that seems to have been effected, after much labor and long perseverance, calculated to inspire confidence in the result.”

“A spirited mare had been worked in the morning, and evidently much abused by the driver, by which it was believed that some nerve had been severely injured. Lock-Jaw ensued in the afternoon, attended with stiffness of limbs, unnatural distension of nostrils and spasmodic affections of her cheeks, neck, sides and flanks; her jaws were so firmly clinched, that no force, considered prudent to apply, was capable of moving them; so restless as to be continually lying down and getting up; and altho' very desirous to drink, the spasms rendered swallowing impossible. Every assistance that could be devised was carefully administered until the forenoon of the next day, when she appeared to be in the agonies of death. In this extremity, application was made to the family physician, who observed, Dr. Rush had informed him, that he had cured a horse with a lock-jaw by dashing cold water over him. With the assistance of several more, therefore, the mare was set on her feet and conducted to a well near at hand, when 30 or 40 pails full of water were dashed over her, so that no part of her body escaped a plentiful bathing, but little good effect appeared to ensue. The bathing was repeated in less than two hours, after which it was thought the clinching of the jaws was a little relaxed; a third bath was therefore administered, when before it was finished, she began to bite the grass around her; while a fourth enabled her to chew and swallow, and the next day she appeared perfectly recovered, but thin and hollow. It is now more than three years since this occurred, and the mare has been as healthy and active ever since as she was before lock-jaw took place. During the intervals of the baths, and for several days after she recovered, she was covered with a blanket, but remained in the field, as it was thought that grass would be a more suitable food than hay.”

The writer in the Cultivator adds:

“It is possible, the contraction would have been overcome much earlier, if the application had been made, as in the other two cases on record, by pouring water from a height along the line of the back bone. I have just heard of a human being, whose death has been occasioned by the lock-jaw, which, I believe sincerely, might have been prevented by a timely application of this very simple remedy.”

## PATENT PUMP, FOR WELLS, CISTERNS, &amp;c.



The above cut represents a pump to which a premium was awarded by the *American Institute* in Oct. 1842, at N. York. It will raise water to the height of 33 feet, and bring it any distance required by means of metal pipes, and appears to be well adapted for dwellings, factories, stables, and other places distant from water. They are very simple, made of iron, easy of repair at a very small expense, and will last for 40 years. They are so made as to avoid freezing of the water in them. We think they should claim the notice of farmers. Mr. E. Whitman is the agent in Baltimore for the patentees, at whose establishments in Light and Eutaw streets they may be examined. Price, No. 1, \$5—No. 2, \$6—No. 3, \$7.

METEOROLOGICAL TABLE, FOR AUGUST,  
Kept at Schellman Hall, near Sykesville, Carroll co. Md.  
Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock, p.m.

Wind.	Temperature	Remarks.
1 W W S	60 70 77	Clear
2 W N S	70 79 76	Cloudy, Rain, 2-10 of ah in. fell
3 S E	75 84 74	Clear
4 S E W	63 83 77	Do
5 SW SW S	70 85 80	Do [in. water fell
6 S NE SE	69 79 69	Clear, Cloudy, Rain, 6-10 of an
7 W SW SW	63 83 78	Clear [rain&hail, 9-8 in. water
8 E SW SE	70 85 69	Fog, clear, violent storm of wind,
9 S S W	65 83 76	Fog, clear, shower
10 S S SE	73 86 73	do do heavy gust, 1-7-10 fell
11 W SW SW	70 80 70	do do shower, 1-10 do
12 S W S	73 79 76	Clear
13 SW E E	69 80 75	do Cloudy
14 W NE E	70 79 73	Cloudy, Clear
15 E E E	70 78 73	Rain, Cloudy
16 NE NE W	69 80 78	Cloudy, Clear
17 W S S	73 81 76	Clear
18 SE SW SW	67 73 71	Cloudy, Shower, Clear
19 E S NE	69 79 76	Cloudy, Clear
20 NE NE NE	67 73 68	Cloudy, Rain, 1-4-10 in. fell
21 W SE S	69 80 75	Cloudy, Shower, 5-10 do. Clear
22 SE W SW	73 83 79	Clear
23 S SW SW	74 85 83	Fog do
24 S SE SE	76 91 80	Do do
25 N SW SW	76 88 86	do
26 W S S	74 89 83	do
27 SW S S	73 81 80	Do do
28 NE E	70 79	Cloudy

You will find that 6 in. water in rain fell from 2d to 22d, which has caused a great growth of vegetation, pastures very good; all fear of a loss of the tobacco, corn and potato crop is at an end, in this section. In my next I will report the examinations of Mr. Patterson's oats and corn fields, with analysis of the limed & unlimed soil, and manures used. W. B.

## BALTIMORE MARKET--Aug. 29.

**Cattle**—The supply on Monday was larger than usual, and prices declined a shade, which induced butchers to buy freely; the offerings were 750 head, 189 of which were driven to Philadelphia; prices ranged at \$1.50 a 2.50, on the hoof, equal to 2.50 a 4.75 nett. **Hogs**, live, in demand, with a good supply, at \$5, for superior lots 5 $\frac{1}{2}$ . **Coffee**, Rio 6 $\frac{1}{2}$  a 7 $\frac{1}{2}$  c. sales. **Cotton**, Mob. 8 $\frac{1}{2}$ , dull. **Feathers**, in demand, ord. 21 a 22, good 26 a 28. **Fish**, Herrings in good demand at \$3 $\frac{1}{2}$ . **Mackerel** \$7 a 7 $\frac{1}{2}$  for large No. 3, and 5 a 5 $\frac{1}{2}$  for small. **Clovers**, price advancing in consequence of the expected shortness of the crop; sales at \$6, for prime. **Timothy Seed**, prime \$2 $\frac{1}{2}$  a 3, sales. **Flaxseed** \$1 a 20. **Iron**, foundry pig, ton, \$33. **Hemp**, Ky. dew rot. 90 a \$96, sales. **Linseed Oil** 68 a 70c. **Molasses**, demand fair, stock light; Cuba 27, P. Rico 27 a 27 $\frac{1}{2}$ , N. Orl. 33 for bbls. wanted, Sug. House 25c. **Beef**, mess \$10 a 11, No. 1, 9 a 9 $\frac{1}{2}$ , prime 7 a 25; Mess Pork 14, prime 11 a 11 $\frac{1}{2}$ . **Bacon**, stock limited, and holders firm; sides 7 a 28, shoulders 7 a 7 $\frac{1}{2}$ , ass'd 8 a 8 $\frac{1}{2}$ , hams 8 a 10, Balt. do. 10 a 11. **Lard** in request at 8 a 8 $\frac{1}{2}$  for No. in kegs, 7 a 8 in bbls. **Whiskey**, stock light, demand good, and price slightly advanced within a few days; sales at 22 a 23 for hhd. 23 a 24 for bbls. **Sugars**, stock of N. O. in first hands exhausted, and purchasers have been obliged to obtain supplies at Philad. and N. Yk. where large sales have been recently been made; prices here range at 6 a 7 $\frac{1}{2}$ ; Porto Rico, sales at 7 a 8 $\frac{1}{2}$ . **Wheat**, supply good since the new crop has come in, until within a few days; prices have advanced a trifle; sales of good to prime reds at 82 a 89, inferior to good 75 a 82, family flour white wheat is worth 93 a 98. **Corn**, sales at 50 a 51 for white, and 53 for yellow. **Penn. yellow** 56, sales. **Md. Rye**, sales at 60 a 62 c. **Oats** 30 a 31c. **Flour**, Howard st. dull, but the advices from Europe has caused a firmness in holders at \$4.50, which is the ruling price; receipt price 4 $\frac{1}{2}$ . **City Mills** stock light, \$4 $\frac{1}{2}$ , and Susquehanna also \$4 $\frac{1}{2}$ . **Rye** \$3, nothing doing. Inspections for the last four weeks, 41,352 bbls. and 3175 hhd. flour and corn meal. **Tobacco**, from the unfavorable accounts from this year's crop, is not likely to be lower this season; the demand for good Md. is fair, and sales are freely made; com. and infer. sorts however are very dull, and sales difficult; we quote for infer. and com. 2a 3; mid. to good 3 $\frac{1}{2}$  a 5 $\frac{1}{2}$ ; good 7 a 7 $\frac{1}{2}$ ; and fine 8 a 14; large sales of Ohio at \$3 a 14; there is a decline of \$2 per 100lbs. of fine yellow and spangled Ohio, taken principally for the Russian market, the season for shipping being past; we quote for com. to mid. 3 a 4 $\frac{1}{2}$ ; good 5 a 6; fine red and wrapp'y 6 $\frac{1}{2}$  a 10; fine yellow 7 $\frac{1}{2}$ , and ex. wrap. 11 a 13. The inspections for the last five weeks are, Maryland 4359 hhd. Ohio 2641, Ken'ky. 295, Missouri 69, Pennsylvania 2. **Wool**, 26 a 27 for com. washed, and 16 a 17 for unwashed.

**Coupons**, to pay State taxes, 78 a 79.

**At Philadelphia**, Aug. 28, Flour 4.50 a 56; Rye 4 $\frac{1}{2}$ ; Corn Meal 2.31 a 2.37 $\frac{1}{2}$ ; Wheat, southern 90c; Pa. 93 $\frac{1}{2}$ ; Corn, southern 53 a 54; sales of Delaware Oats at 32c; southern do. 31 a 32.

**At New York**, Aug. 26, Flour steady with a good demand; Genesee \$4 $\frac{1}{2}$ , Ohio and Michigan 4 $\frac{1}{2}$  a 56, Georgetown, Penn. & Balt. \$4 $\frac{1}{2}$  a 4 $\frac{1}{2}$ ; South. Corn 57c, w. whiskey, in bbls. 23 $\frac{1}{2}$ ; mess Pork 14; Cotton, Upland and Florida, ord. to good ord. 6 a 6 $\frac{1}{2}$ , mid. to good mid. 6 $\frac{1}{2}$  a 7 $\frac{1}{2}$ , mid. fair to fair 7 $\frac{1}{2}$  a 7 $\frac{1}{2}$ , fully fair to good fair 8 a 8 $\frac{1}{2}$ ; Mob. & N. Orl. ord. to good 6 a 6 $\frac{1}{2}$ , mid. to good mid. 7 a 7 $\frac{1}{2}$ , mid. fair to fair 7 a 8 $\frac{1}{2}$ ; good fair 9 $\frac{1}{2}$ .

**At Boston**, southern yellow flat Corn 62 a 63, white 57 a 60; southern Oats 36 $\frac{1}{2}$  a 37 $\frac{1}{2}$ .

**BEMENT'S AMERICAN HOTEL, NO. 100 STATE STREET, ALBANY.**—In location, this house has many advantages, being situated in the centre of the city, on one of the most beautiful and airy streets, and within a short distance of the Eastern and Western depots, and the landing of the Steamboats, renders it very convenient for the man of business or gentleman of leisure.

The subscriber places great reliance on the countenance and support of the Agriculturists throughout the United States who may visit this city; and pledges himself to spare no exertion to render their stay agreeable, should they favor him with their company.

A carriage will be in attendance on the arrival of the cars and boats, to convey passengers to and from the hotel free of expense.

Be particular and enquire for "*Bement's American Hotel, Cage*," or you may be imposed on.

Sept. 1.

C. N. BEMENT, Proprietor.

**AGRICULTURAL IMPLEMENTS—FARMERS!** we offer you this fall, PLOUGHS of the most approved kinds, viz. the well tried Minor & Horton, Wiley, and Prouty & Mears' Centre-draught Plough, and Points and Shares for all kinds; all of Northern make, and composition metal.

We still have lots of those premium Corn-Shellers, so much praised by all who use them. All we ask is for you to try them. Our prices will be reasonable.

We also keep all kinds of GARDEN and FIELD SEED, at No. 7, BOWLY'S WHARF, Baltimore.

Sept. 21

WM. GAWTHROP & SON.

"Spade labour, the perfection of good husbandry."

PULVERIZA-  
TION.



DECOMPOSI-  
TION.

**EZRA WHITMAN, No. 8 Eutaw street, and No. 55 Light Street,** has been appointed by the patentees, Prouty & Mears, of Boston, sole Agent in Baltimore and parts adjacent for the sale of the Boston Centre-draught Plough, with new gearing, &c.

By this admirable implement, confessedly "the best plough known in this country for beauty of work and pulverizing the soil," the labors of man and team are lessened one-half, while the power and steadiness of draught obtained are so great, that any depth or width of furrow is broken up, pulverized, and carried completely over, so as to bury any quantity of weeds, herbage, or long dung, with perfect ease and facility, and with the precision of the spade.

Prices, from \$6 to \$13 dollars, with extra point and share. No extra charge for the new gearing. Casings of every size and variety kept constantly on hand.

Sept. 11

**THE WHEAT CROP.**—The wheat crop promises to be unusually large this year, and the prospects for advanced prices being favorable, should induce the agricultural community to provide themselves with machinery to put their crops in the markets at the earliest period and in the best condition to command the highest market rates. The subscribers therefore, have made preparation to meet that object, by providing Machinery of best construction, which they offer for sale at the following prices, viz.

**HORSE POWERS**, for the draught of 2, 4 or 8 horses, at \$75, \$100 and \$125 each. Powers at \$100 and \$125 are particularly recommended and warranted superior.

**THRESHING MACHINES**, adapted to be driven by the above powers, price \$40 to \$60, all made on the spike principle, (no cast iron used) and each spike secured with a screw nut and warranted not to break or cause detention by their use.

Driving BANDS for do. 8 to \$10 each.

Rice's and Watkins' patent **PANNING MILLS**, warranted equal to the best patterns in the U. States, price \$25, \$30 and \$45.

—**CORN MILLS** at \$40; Corn and Cob **CRUSHERS**, \$30-\$55; **PLOWS** and other Agricultural Machinery; **TOOLS**, **GARDEN & FIELD SEEDS**, a large and general assortment. For a description of sorts we refer to our general catalogue, to be had gratis.

ROBERT SINCLAIR, Jr. & CO.

Agricultural Implement Manufacturers and Seedsmen, 62 Light street, Baltimore.

**WHITMAN'S AGRICULTURAL WAREHOUSE**, No. 2 EUTAW STREET, opposite the *Eutaw House*. Also for the accommodation of the Bay trade he has opened another House on LIGHT STREET, 2nd door from Pratt; where will be found his new improvement in the way of Horsepowers and Threshing Machines, together with a general assortment of all kinds of Agricultural Implements, such as Fanning Mills, which he warrants superior to any other, or they may be returned and the money will be refunded; also Plows on the same terms, a variety of Straw Cutters, Corn Shellers, Corn and Cob Crushers, &c. &c. &c.

Plough Castings always on hand, and all kinds of Repairing done at short notice and on reasonable terms.

Jy.

EZRA WHITMAN.

**DEVONS**—The subscriber offers for sale a number of Devon Buls, at \$25 to \$110, some of them not surpassed in this or any other country. Also a splendid young Durham, 14 months, and a number of full bred and grade Heifers and Cows in calf, very cheap, the owner being overstocked. S. SANDS

**AGRICULTURAL IMPLEMENTS—LABOR SAVING MACHINERY.**—**GEORGE PAGE**, Machine & Manufacturer, Baltimore st. West of Schreder st. Baltimore, is now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in his line. He can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from \$85 to \$200, and each simple, strong and powerful. His *Horse Power & Threshing Machine*, he is prepared to supply at the low price of \$125 complete; the Threshing Machines without the horse power, according to size, at \$30, 40, 65 and \$75. Improved Seed and Corn Planters; Portable Tobacco Press; Portable Grist Mills complete, \$125; Corn & Cob Crushers, superior and improved, \$45; Morticing Machines, all sizes; Post Augers, \$5; Tenoning Machines; Cylindrical Corn Shellers from \$30 to \$40 each: they are of great power, shelling, by horse power, 3 to 4000 bushels per day; Vertical Sawing Machines; Stereotype Machines; Forging Pumps; Veneering Saw; Cider Presses; together with every other article of *Casting & Machinery*. The public are invited to call and examine for themselves.

July, 11

**JAMES MURRAY'S CORN & COB CRUSHERS.**

These already celebrated machines have obtained the premium by a fair trial against other Crushers exhibited at the fair held at Govanstown, Balt. co. Md. in Oct. 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices \$25, \$30, \$35, \$40, \$45.

Also—**Small MILLS**, which received a certificate of merit, for \$15—I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics. Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. Also, a second hand Steam Engine, 16 horse power, and the works for 2 Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by me, warranted to operate well. Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer Office; or the subscriber.

Patent Rights for the Corn and Cob Crusher for sale.

Jy. JAS. MURRAY, Millwright, York near Light st. Balt.

#### CONTENTS OF THE SEPTEMBER NO. 4.

Farm Work for Sept. 6 to 67	(Mr. Chisolm on do.	84
Mr. Carmichael on prevention of smut in wheat,	(Hovey's seedling strawberry	83
American Institute Fair,	67 The Upas in England,	84
Charcoal for wheat,	68 (Work in the Garden,	85
Tobacco in Florida & Conn.	69 (Budding & Grafting,	85
E. Stabler's experiments with guano, bone dust, &c.	70 (W. W. W. Bowie's trial of a new plow for tobacco,	86
Gov. Hammond on Cotton	71 D. W. Nail's correction of an error,	86
culture, &c.	71 (Mrs. Affleck's directions for Bone-Manure, by R. L. Allen,	86
Grasses for the south,	73 preserving, &c.	87
Cincinnatus on meadows,	74 How to cook tomatoes,	88
Querries on the use of guano, bone & lime, and answer,	74 To pickle Onions; to make catup; to banish bed bugs	88
Mr. Clement's buck Prince,	75 red ants,	88
Coarse & fine wooled sheep compared,	76 (Dahlias; Rare Flowers; Bell	88
Col. Randall's Merinos,	77 Work in the Flower garden	88
C. N. Bement on the influence of food on cows,	78 (Dahlias; Rare Flowers; Bell	88
Dr. Jackson on cheese mak.	78 on the Catawba grape,	88
Notices to Correspondents;	79 Wine from do.	88
of the Alpaca Sheep; of Mr. Gowen's letter to gen. Richardson; of Mr. Phillips' paper on the agriculture of Mississippi; of our new Series; of the present number; of a compliment to us; of English crops,	80 Hybridization of grapes,	88
Crops in North Carolina,	80 (The Devon Cow,	90
Balt. Co. Agri. Society;	81 Rove cows in the West,	90
Mediterranean Wheat,	82 How to bait a rat trap,	90
Heavy Wheat	83 Thunderstorms,	90
Tho. Kenney's prolific Rye,	84 Plentifulness of peaches,	90
Guano in Florida,	85 South-down ewes wanted,	90
Notice of the Crops,	86 Hussey's Reaper, recommen-	91
" of Bement's hotel,	86 dations of,	91
Orators of Del. Agr. Soc.	87 Z. on Centre-draught plow,	92
Harvesting of Corn,	87 (Trial of do. at Albany,	92
Buckwheat for hay,	88 Berkley (Va.) Ag. Soc.	93
Skinner's Farmer's Library,	89 (Lock-jaw in a horse cured	94
Maryland Farmers' Club,	90 A Pump for farmers, &c.	95
Prevention of injury to trees by insects,	91 The Weather for August,	95
	92 The Markets, &c.	96
	92 Advertisements, &c.	96
	93 Illustrations.	96
	94 Plan of a hay-rick,	76
	94 Portrait of Mr. Clement's	76
	94 South-down buck,	77
	94 Hovey's Strawberry,	83
	94 (Portrait of a Devon Cow,	90
	95 Cut of a valuable Pump,	95